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AUTHOR Bronson, Martha B.
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ABSTRACT

This address presents a discussion of the rationale, procedures, reliability, and validity of the "Social and Nonsocial Executive Skills Profile." The skills profile was developed to identify and measure aspects of the preschool child's classroom behavior that are highly related to social and nonsocial competence. Executive competence is defined as the effectiveness of the child's skill in receiving, sorting, and processing information and in generating effective strategies for coping with a situation. The profile requires six periods of observation (three each for social and nonsocial situations), 10-15 minutes in length. The methods used to determine interobserver reliability and instrument validity are discussed. Tentative results obtained from limited use of the profile are presented. Approximately two-thirds of the document is appendixes which include the manuals for observation and scoring, the scoring booklet, and a competence rating scale designed to be completed by the child's teacher. (ED)

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EXECUTIVE COMPETENCE IN PRESCHOOL CHILDREN

Martha B. Bronson
Harvard University
Laboratory of Human Development
Roy E. Larsen Hall, Appian Way
Cambridge, Massachusetts 02138

Rationale:

The *Social and Nonsocial Executive Skill Profile* was developed in an attempt to identify and measure aspects of the preschool child's classroom behavior that are highly related to social and nonsocial competence. The underlying hypothesis of the Profile is that the concept of "executive" ability or skill can be applied to both social and nonsocial behaviors, and can provide a reasonable basis for identifying behaviors related to competence. The term "executive" is used in the information processing sense of "executive routines" or "programs" which organize and guide incoming and outgoing data. It implies skill in receiving and sorting information, skill in effectively processing information, and skill in generating effective strategies for coping with a perceived situation. In the child's social and nonsocial encounters with the environment executive competence is considered to be demonstrated by:

a - skill in *recognizing* or identifying important cues in a situation,
b - skill in *predicting* possible sequences of events and outcomes of a situation (i.e. grasping the possibilities inherent in a situation),
c - skill in *controlling* both the self and the social or material "other" in the situation in order to effectively reach chosen goals.

At a more specific behavioral level, nonsocial executive skill is defined as skill in choosing and coping with tasks. It requires the ability to select tasks appropriate to one's level of skill, to organize task relevant materials, to use effective coping strategies, to resist distraction, to notice errors and to correct them or to effectively summon help, to try repeatedly (persist) when necessary, and, ultimately, the ability to reach a chosen goal successfully. Executive skill in the social area is defined as the ability to control and direct oneself adequately and constructively in social situations and the ability to influence others effectively in socially approved ways. The emphasis on socially approved coping behaviors is not to stress compliance or "pleasing the teacher", but is aimed at assessing the child's ability to perceive and function effectively within the norms of the society in which he lives. Since approved social behaviors and approved methods of social control of others vary with the culture or sub-culture, any assessment of a child's competence in this area carries with it the value judgements of the particular culture. The judgement implicit in the categories of this Profile is that a general attitude of negotiation and reciprocity in dealings with others is a desirable goal and standard of measure for the preschool child's behavior. This attitude says that one's own desires and goals are important and valuable, but that the desires and goals of others are also important and must be taken into account. The ability to assume this attitude and to exhibit effective give and take, or reciprocity, in social situations appears to be emergent during the preschool and early primary school years, whether this emergence is explained by a decline in "egocentrism" as Piaget suggests or by a growth in the number of effective social strategies at the child's command as Social Learning theorists suggest. The ability to adjust to the goals and the personalities of others while retaining one's own identity and goals implies the ability to control or influence others with effective but non-violating strategies, and the balancing ability to be reasonably influenced by the group without being totally overcome or dominated by others. Physical force is considered to be a strategy which violates the social other and therefore does not show an attitude of negotiation and reciprocity. The ability to assert one's rights and sometimes, though this is rarer during the preschool years, the rights of others is also considered important because it is assumed to reveal an awareness of more general rules for social interaction which apply across specific social situations and independently of specific individual wishes - (e.g. social contract rules). Specific strategies which facilitate and sustain social interaction and promote reciprocal cooperation, such as sharing, helping, trading, taking turns, combining resources etc., are also considered important evidences of social competence.

Because the purpose of the Social and Nonsocial Executive Skill Profile is to measure aspects of the child's classroom behavior that are highly related to competence, the chosen method of assessment is classroom observation. There are a number of well known hazards in naturalistic observation - large investments of time and money, difficulties in obtaining reliability among observers, and difficulties in obtaining comparable observations among children to name a few - but these seemed outweighed by the advantages of looking at classroom behavior when the goal is to measure this behavior at a level of specificity and numerical precision at which teacher ratings cannot be expected to be adequate. Another argument for using an observational technique is its particular usefullness with young children as compared with more structured "tests". The child does not have to interpret directions or respond in any specific, and perhaps unfamiliar, way and the observer can see behavior as it occurs in the natural situation, thus reducing the chance of incorrect assumptions. At another level, it can be argued that the current theoretical "state of the art" in social and emotional development is so primitive that observation may give the best chance to develop a reasonable theoretical approach. The work of Jean Piaget, as well as several of today's speakers, would suggest that reliable behavior observations can generate as well as test theory.

Procedures:

The Executive Skill Profile was originally designed for use with children between the ages of three and six years, and the data which will be presented here comes from this age group. Recently, the instrument has been tried with a few six and seven-year-old children in first and second grade classroom settings. More testing must be done, but the procedure and behavior variables in the instrument seem applicable and useful with this age group as well as with the younger children.

Each child is observed for six ten or fifteen minute periods. Three (or half) of the observations are begun when the child is beginning a social interaction and three are begun when the child is beginning a mastery task. Fifteen minute observations seem preferable for the older (six and seven-year-old) children because their social interactions and mastery tasks tend to continue for longer periods, and the instrument should reflect this. Each of the observations should be done on a different day over a period of no less than two weeks and no more than one month.

(slide 1 - observation protocol sheet)

The observation technique in the Profile is a modified time sampling procedure. Each horizontal line of the observation sheet represents a fifteen second interval and double horizontal lines represent one minute intervals, so each page lists data from five minutes of observation. The beginning of each fifteen second interval is signaled by a sharp click from an electric timer into an earphone worn by the observer. The timing device, designed by Leifer and Leifer (1971), is light and worn about the neck so that the observer can move about easily. Continuous events are recorded by vertical lines extending over all the intervals in which the behavior occurs. Isolated events are indicated by checks and code letters in the appropriate boxes. Whenever behavior is directed toward another person, the age and sex

SLIDE 1

Name:
Age:
Sex:
Observer:
Date:
Place:
Time:
Obs.#:
Page #:

	FOCUS						NONSOCIAL SKILLS										SOCIAL SKILLS										AFFECT			
	Social			Non-Social																										
ACTIVITIES	Parallel	Associative	Cooperative	Mastery	Gross Motor	Fantasy	Coping Strategy GAM,CS,GRM,NF,CF,AFC, CSDC,CC,VR,CD	Notice Nov/Discrep.	Distracted	Interrupted	Dual Focus	Ask Help S/N	Gives Up	Corrects Self	Tries Again S/N	Completes/No S/N	Converse	Soc.Control V/P/D S/N	Competes S/N	Follows V/P	Controlled V/P/D	Accept Rules/No	Res./Ign.Control S/N	Asserts Rights S/N	Shows Symp./Emp. V/P	Cooperation Strategy H,S,T,TO,TI,CR,JE,PS, AR,RS	Affect Pos./Neg.	Pride	Affection V/P	Hostility V/P

of that person is noted beside the check. The success or failure of a goal directed behavior is noted by code letters next to the appropriate check mark. The final record therefore shows the frequency with which the target behaviors occurred, the length of time over which they continued, the person(s) to whom they were addressed if any, and the success or failure of the behaviors where relevant.

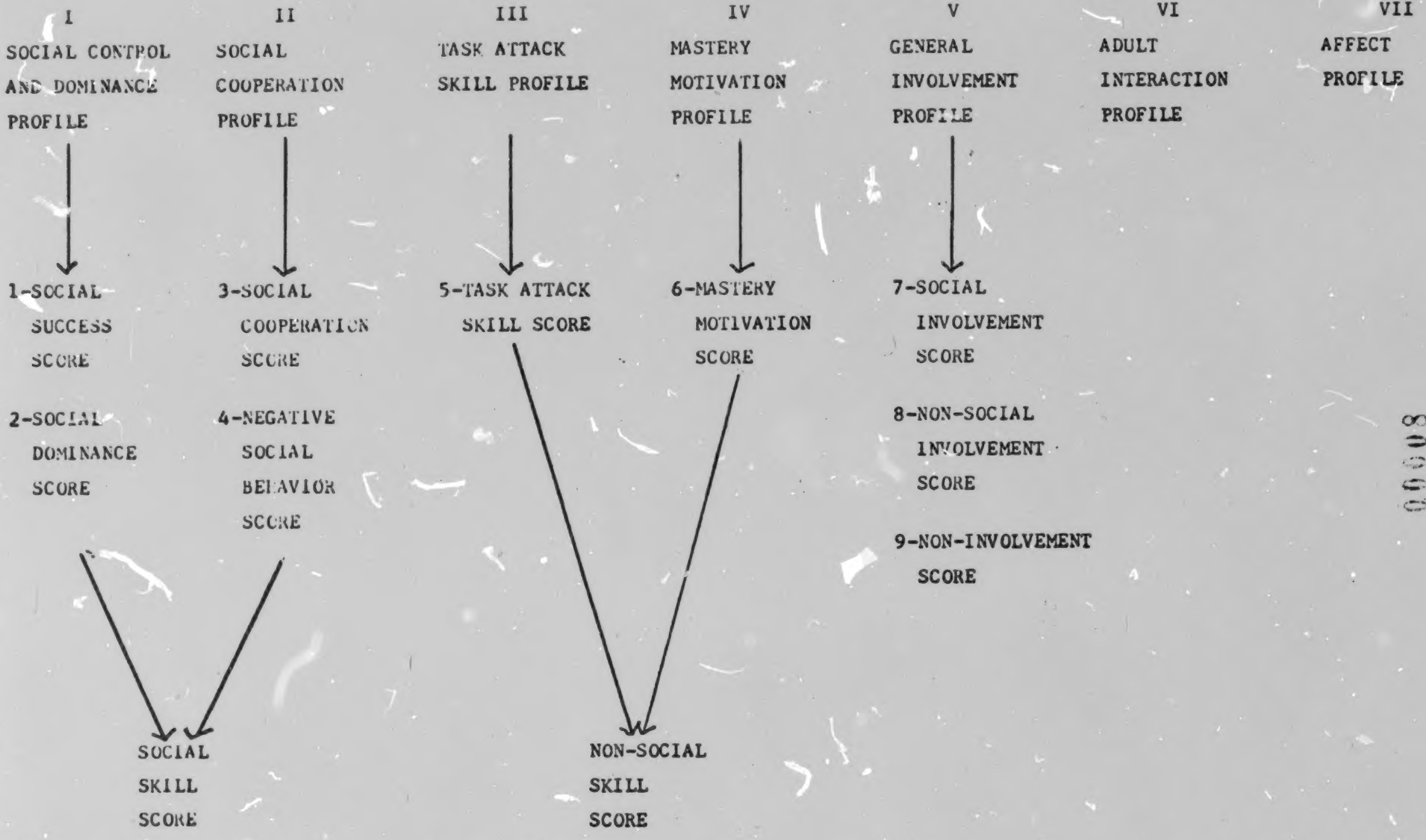
The observation sheet is divided into five parts. The ACTIVITIES section is for a brief written narative record of the ongoing activities of the child to aid in clarifying and interpreting the specific recorded behaviors. The FOCUS section indicates the overall level or apparent goal of specific activities - parallel, associative or cooperative level social involvement, and mastery, fantasy or gross motor nonsocial involvement. The NONSOCIAL SKILLS section includes categories for those behaviors which are thought to be positively or negatively related to nonsocial competence, and the SOCIAL SKILLS section includes categories for those behaviors which are thought to be positively or negatively related to social competence. The selection of behavior categories was based on the rationale outlined above and on the discriminability of the category for reliable scoring (tested during four months of pilot observations). The AFFECT section gives an indication of the child's emotional responses in particular social or nonsocial situations, with the general hypothesis that positive affect should accompany the child's sense of competence and adequate coping in a situation and negative affect should accompany a sense of incompetence, frustration or inability to cope.

(slide 2 - diagram of scoring system)

The instrument provides three levels of assessment of a child's competence. At the most detailed level, there are specific numerical records of the child's observed behaviors (as rate and ratio scores) which may be compared with the average scores of a reference group such as the child's class or a

SLIDE 2

OUTLINE OF SOCIAL AND NONSOCIAL EXECUTIVE SKILL PROFILE SCORING SYSTEM



I
SOCIAL CONTROL
AND DOMINANCE
PROFILE

1-SOCIAL
SUCCESS
SCORE

2-SOCIAL
DOMINANCE
SCORE

II
SOCIAL
COOPERATION
PROFILE

3-SOCIAL
COOPERATION
SCORE

4-NEGATIVE
SOCIAL
BEHAVIOR
SCORE

SOCIAL
SKILL
SCORE

III
TASK ATTACK
SKILL PROFILE

5-TASK ATTACK
SKILL SCORE

IV
MASTERY
MOTIVATION
PROFILE

6-MASTERY
MOTIVATION
SCORE

NON-SOCIAL
SKILL
SCORE

V
GENERAL
INVOLVEMENT
PROFILE

7-SOCIAL
INVOLVEMENT
SCORE

8-NON-SOCIAL
INVOLVEMENT
SCORE

9-NON-INVOLVEMENT
SCORE

VI
ADULT
INTERACTION
PROFILE

VII
AFFECT
PROFILE

larger sample of children his age. These behavior records are grouped into seven Profiles according to subject area.[1] At a more general level, the instrument yields nine summary subscores which are derived from composit groupings of the behaviors scores in the Profiles. A Social Success Score and a Social Dominance Score are derived from the behavior records in Profile I. A Social Cooperation Score and a Negative Social Behavior Score are derived from Profile II. A Task Attack Skill Score is derived from Profile III and a Mastery Motivation Score is derived from Profile IV. A Social Involvement Score, a Nonsocial Involvement Score and a Noninvolvement Score are derived from Profile V. No general or summary scores are provided for the behavior records in Profile VI, the Adult Interaction Profile, because they do not have an unequivocal relationship to social or nonsocial competence. They are included in a separate section to provide clinical information which may be relevant to competence in combination with information in other Profiles. The Affect behaviors in Profile VII do not have separate summary subscores because they are included in Profiles I through IV where relevant, and are only listed together in a separate section for ease of reference. At the most general level the instrument yields a Social Skill Score derived from Profiles I and II, and a Nonsocial Skill Score derived from Profiles III and IV. All the summary scores, the nine subscores and the two general scores, must be considered experimental at this stage of the instrument's development because they involve hypotheses about the relative importance of certain behaviors which need additional support from observations of larger numbers of children in the future. The general basis of judgement in the current scores is that competence can be assessed by looking at the sustained levels of social or nonsocial involvement of a child, his use of effective strategies in each situation, and the outcomes of his attempted behaviors and apparent goals in terms of the success or failure of what he attempts.

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[1] See the Scoring Manual - Appendix II

Reliability and Validity:

The instrument has been used in two experimental situations to date. It has been used as the dependent variable (pre and post assessment) in a study of the effects of pro-social modeling on Sesame Street done by Aimee Leifer at Harvard. The subjects were 45 four and five-year-old children from one middle class day care center and one center which had children primarily from single-parent families in which the mother was receiving welfare. The instrument was also used as one of a battery of tests given to 32 public school kindergarten children from four classrooms in several schools, who had been rated by their teachers as either very high or very low in probable school adjustment and achievement.

(slide 3 - inter-observer reliability)

In the public school study observers were trained over a two week period. During the first week they learned the observation categories and tried to use them in classrooms without a trainer present. During the second week the observers worked in classrooms with a trainer. At the end of the second week reliability was checked by joint observation of four different children by the trainer and the observer for the usual 10 or 15 minutes each. Inter-observer reliability was computed as percent agreement scores category by category. Column 1 shows the reliability figures if joint zeros in a category are counted as agreement. Column 2 gives the reliability scores if zeros are ignored. Dashes indicate that little or no data appeared in a category. Parentheses indicate a larger but still small amount of data in a category. In general, affect categories showed the least reliability. In the earlier Sesame Street study, observers were trained in approximately one rather than two weeks and the reliabilities were five to ten points lower in each category.

SLIDE 3

SOCIAL AND NONSOCIAL EXECUTIVE SKILL PROFILE

INTER-OBSERVER RELIABILITY

Percent Agreement category by Category among Three Observers

Category	Percent Agreement (zeros counted)	Percent Agreement (zeros not counted)
TIME SOCIAL	.99	.98
TIME COOPERATIVE PLAY	.97	.75
TIME ASSOCIATIVE PLAY	.93	.85
TIME PARALLEL PLAY	.97	.89
TIME CONVERSE	-	-
TIME MASTERY	.99	.98
TIME GROSS MOTOR	-	-
TIME FANTASY	-	-
TIME DISTRACTED	(.88)	(.33)
TIME NO ACTIVITIES	1.00	1.00
# COPING STRATEGIES	.97	.97
# TASKS TRIED	1.00	1.00
# TASKS COMPLETED SUCCESSFULLY	1.00	1.00
# TRIES AGAIN	.98	.98
# TRIES AGAIN SUCCESSFULLY	.91	.91
# CORRECTS ERRORS	.86	.85
# NOTIVE NOVELTY/DISCREPANCY	-	-
# DUAL FOCUS	-	-
# MASTERY HELP	.98	.92
# PRIDE	-	-
# POSITIVE AFFECT IN MASTERY	.75	.50
# NEGATIVE AFFECT IN MASTERY	.71	.22
# SOCIAL CONTROL OF PEERS	.85	.84
# SOCIAL CONTROL SUCCESS	.94	.93
# COMPETES	-	-
# COMPETES SUCCESSFULLY	-	-
# CONTROLLED BY PEERS	.90	.89
# FOLLOWS OR IMITATES PEERS	.68	.61
# SOCIAL HELP	(1.00)	(1.00)
# COOPERATIVE STRATEGIES	.91	.80
# VERBAL SOCIAL CONTROL	.74	.73
# ASSERTS RIGHTS	(1.00)	(1.00)
# SYMPATHY/EMPATHY	-	-
# NOT ACCEPT RULES	-	-
# RESIST PEERS	.76	.67
# RESIST PEERS SUCCESS	.77	.64
# HOSTILITY	(1.00)	(1.00)
# POSITIVE AFFECT SOCIAL	.52	.40
# NEGATIVE AFFECT SOCIAL	-	-

Inter-observation reliability in the public school study, showing the stability of behavior from one observation to the next, was measured by a one way repeated measures analysis of variance for each category. In general, mastery behaviors were more stabile than social behaviors, which is reasonable since the child has more direct control over the mastery situation. Intraclass correlations for social catagories ranged from approximately zero for infrequently occurring behaviors and more environmentally determined behaviors (such as being controlled by peers), to correlations between .30 and .50 for more self determined behaviors (such as rates and percents of successful attempts to control others). Negative social behavior scores (which include hostility and resisting rules rates) had a reliability of .44, and the summary Social Skill Score had a reliability of .49. Frequently occurring mastery behaviors had reliabilities that clustered between .50 and .60 with the Task Attack Skill Score yielding a reliability of .66 and the Nonsocial Skill Score showing a reliability of .65. Inter-observation reliability figures from the Sesame Street study are lower, but are difficult to interpret because of the possibly confounding effects of the intervention.

Ideally, an instrument that purports to measure the degree to which a child possesses specific skills must also demonstrate that the sample of behavior observed is sufficient to make that judgment. In practice, the difficulties involved in achieving such a clear cut demonstration are immense and admit of no easy or obvious solutions. Extensive concentrated observations within a relatively brief time span may provide a clear picture of a child at a particular point in time, but may lack generalizability and may magnify the problem of observer influence on the observed. Observations spaced over relatively long periods of time run the risk of seeming less reliable because of real changes in behavior over time. This is a particular problem with very young children, including those of the target age group. Additional difficulties are added when one considers that some behavior characteristics are apparently more variable than others and some children are apparently more variable than others. If a measure of the consistency of several observations reveals only slight variations from one time to the next, this suggests that a relatively small number of observations would provide an adequately reliable sample. A lack of consistency among several observations might not, however, indicate that all taken together were an unreliable sample. It might be the case that while one specific observation is not highly similar to a second or a third, two or three observations together might provide a good sample of a child's typical behavior. The question of reliability here merges into one of validity, because the issue revolves around the ability of the instrument to accurately reflect, and thus assess, skills. For this reason, a teacher rating scale[1] with as many of the observation variables as it seemed likely that the teachers could reasonably assess was devised and used (after all observations in a classroom were completed) to provide information on the reliability and the validity of the observation instrument.

(slide 4 - comparison of teacher rating scale and observation variables)

Pearson product-moment correlations between the teacher rating scale categories and the corresponding observation categories reveal substantial agreement. Specific behavior categories show moderate to high correlations with the relevant rating scale categories, and the two general observation scores correlate well with the rating scale general scores. The general observation scores also show an interesting and theoretically consistant pattern of relationships to relevant rating scale variables. Social and Nonsocial skill variables also showed a number of interesting intercorrelations, not given on this chart, which suggest, as does the following data to be presented, that social and nonsocial skills are related. The above figures are from the public school study but the Sesame Street data shows similar rating scale/observation scale agreement.

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[1] See the General Competence Rating Scale - Appendix III

SLIDE 4

*$p < .05$
**$p < .01$
***$p < .001$
$N = 32$

Pearson Product-moment Correlations
between
Executive Skill Profile Classroom Observation Variables and Teacher Rating Scale

ESP Observation Variables	Rating Scale Variables	Correlation
SUCCESSFUL SOCIAL CONTROL OF PEERS	SUCCESS IN CONTROLLING PEERS	.39*
SUCCESSFUL COMPETES	COMPETES	.36*
RATE FOLLOWS/IMITATES PEERS	CONTROLLED BY PEERS	.24
	FOLLOWS/IMITATES PEERS	.39*
RATE COOPERATIVE STRATEGIES	USES COOPERATIVE STRATEGIES	.48**
RATE SHOWS HOSTILITY	SHOWS VERBAL HOSTILITY	.34
	SHOWS PHYSICAL HOSTILITY	.26
RATE COPING STRATEGIES	USES GOOD TASK STRATEGIES	.44*
% TASKS COMPLETED SUCCESSFULLY	SUCCEEDS IN TASKS	.70***
% CORRECTS ERRORS	SEES ERRORS AND CORRECTS	.35
% TIME IN MASTERY TASKS	% TIME MASTERY	.37*
% TIME DISTRACTED	DISTRACTED	.24
	GIVES UP ON TASKS	.54**
	RETURNS TO TASK AFTER INTERRUPTION	-.48**
% TIME IN SOCIAL ACTIVITY	% TIME SOCIAL	.47**
% NOT INVOLVED	TIME AIMLESS	.44*
SOCIAL SKILL SCORE	PLAYS WELL ON OWN	.43*
	USES WORDS OR WITS TO CONTROL	.59***
	PHYSICAL FORCE TO CONTROL	-.07
	SUCCEEDS IN CONTROLLING	.38*
	ASSERTS RIGHTS	.62***
	ACCEPTS RULES	.27
	USES COOPERATIVE STRATEGIES	.40*
	GENERAL SOCIAL COMPETENCE	.54**
NONSOCIAL SKILL SCORE	PLAYS WELL ON OWN	.35
	USES GOOD TASK STRATEGIES	.57***
	NOT DISTRACTED	.26
	SEES ERRORS AND CORRECTS	.53**
	GIVES UP ON TASKS	-.55**
	RETURNS TO TASK AFTER INTERRUPTION	.60***
	SUCCEEDS IN TASKS	.68***
	ENJOYS TASKS	.32
	SHOWS PRIDE IN OWN WORK	.47**
	% TIME MASTERY	.61***
	GENERAL TASK COMPETENCE	.59***

During the same period that the public school children were observed in the classrooms, they were also given the McCarthy Scales of Children's Abilities (MSCA), the Meeting Street School Screening Test (MSSST) for educational readiness, and a pediatric examination to identify neurological dysfunction.

(slide 5 - observations correlated with MSCA)

Pearson product-moment correlations were computed between the behavior variables and subscores of the observation instrument and the child's scores on each of the other tests. Slide 5 shows the behavior variables that correlated most significantly with the McCarthy subtest scores, and the correlations of the subtests with all the observation summary scores. Both social and nonsocial observation variables and summary scores show significant correlations with the McCarthy subscores. The McCarthy Perceptual Score and the General Cognitive Score show the strongest degree of association with the observation data. Certain observed behaviors show a consistent negative association with the skill and competence related scores in all the tests. These behaviors are:

a - the rate of asking for help (usually from adults) in a social situation involving peers.

b - the rate of expressing hostility to others,

c - the percent of time distracted during mastery activities,

d - the percent of social time spent in associative or parallel play rather than cooperative play,

d - the percent of time engaged in gross motor activities,

e - the percent of time engaged in solitary fantasy play, and

f - the percent of time spent in noninvolved or apparently aimless activity.

Not all of the figures for these apparently negative behaviors appear in the slide charts because space permitted a listing of only those behaviors with the strongest positive or negative associations.

SLIDE 5

N = 32
* $p < .05$
** $p < .01$
*** $p < .001$

Pearson Product-moment Correlations
between
Executive Skill Profile Classroom Observation Variables and the McCarthy Scales of Children's Abilities

ESP OBSERVATIONS

ESP Observation Variables	MCCARTHY SCALES SUBSCORES Verbal Score	Perceptual Score	Quantitative Score	Genl. Cognitive Score	Memory Score	Motor Score
% SUCCESSFUL SOCIAL CONTROL PEERS	.35	.49**	.36	.46*	.43*	.36
RATE ASK SOCIAL HELP	-.51**	-.47*	-.41*	-.53**	-.44**	-.29
% TIME IN COOPERATIVE PLAY	.43*	.60***	.27	.52**	.34	.41*
RATE COPING STRATEGIES	.29	.51**	.09	.37*	.26	.38*
% TASKS COMPLETED SUCCESSFULLY	.47*	.71***	.59***	.68***	.57**	.49**
% TRIAL COMPLETED SUCCESSFULLY	.38*	.43*	.40*	.46*	.43*	.45*
AV. TIME PER MASTERY TASK	.43*	.46*	.54**	.55**	.48**	.24
Summary Scores						
SOCIAL SUCCESS SCORE	.30	.48**	.39*	.44*	.44*	.44*
SOCIAL DOMINANCE SCORE	.24	.56**	.09	.36	.20	.40*
SOCIAL COOPERATION SCORE	.44*	.56**	.23	.50**	.35	.36
NEGATIVE SOCIAL BEHAVIOR SCORE	-.05	-.10	.11	-.02	.04	-.28
TASK ATTACK SKILL SCORE	.41*	.60***	.25	.51**	.39*	.47*
MASTERY MOTIVATION SCORE	.52**	.60***	.41*	.61***	.51**	.42*
SOCIAL INVOLVEMENT SCORE	-.20	.24	.04	.02	-.19	.24
NONSOCIAL INVOLVEMENT SCORE	.27	.17	-.01	.19	.23	.18
NONINVOLVEMENT SCORE	.06	-.20	.02	-.05	.04	-.29
SOCIAL SKILL SCORE	.41*	.57**	.36	.52**	.43*	.46*
NONSOCIAL SKILL SCORE	.45*	.63***	.29	.55**	.43*	.48**

(slide 6 - observations correlated with MSSST)

Slide 6 shows the behavior variables that correlated most significantly with the Meeting Street Test scores, and the correlations of the test scores with all the observation summary scores. Again both social and nonsocial behaviors and summary scores show significant association with the standardized test scores. The Language Subscore and the Total Score show the strongest association with the observation data. In general, the negative associations are as described above. Social Involvement Scores sometimes have a negative relation to competence and skill scores, as in this case. This may be because very high Social Involvement Scores usually indicate little or no time spent in mastery activities.rather than a balance between the two. High level social involvement is not a negative indicator since the percent of social time spent in cooperative play is always positively (and usually significantly) associated with competence ans skill scores.

Correlations between the observation data and the pediatric examination will not be examined here because they have already been presented in an earlier paper by York and Levine[1] at this conference.[2]

Supporting evidence for the face validity of the observation instrument comes from an analysis of the amount of variance in the original high/low classification of the public school children which is accounted for by the observation variables. The teachers had chosen for test screening only those children whom they considered either very high or very low in general competence and probable school adjustment.

(slide 7 - high/low ratings related to observation variables)

A two way analysis of variance (teacher rating by class) was computed for each

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[1] York, L. M. and Levine, M. D. "A New Pediatric Component of an Interdisciplinary Assessment of School Readiness", paper delivered to the American Educational Research Association Annual Meeting, Washington, D.C. March 31, 1975.

[2] It should be noted that all the above measures of association will probably reflect an over estimate because of the sample extremes.

SLIDE 6

N = 32

* p < .05
** p < .01
*** p < .001

Pearson Product-moment Correlations
between
Executive Skill Profile Classroom Observation Variables and the Meeting Street School Screening Test

ESP OBSERVATIONS	MEETING STREET TEST SCORES							
Observation Variables	Motor Raw	Motor Scaled	Visual/Percept. Raw	Visual/Percept. Scaled	Language Raw	Language Scaled	Total Raw	Total Scaled
% SUCCESSFUL SOCIAL CONTROL PEERS	.55**	.41*	.45*	.36	.67***	.48**	.67***	.44*
% SUCCESSFUL RESIST CONTROL PEERS	.33	.32	.57**	.56**	.49**	.45*	.55**	.44*
RATE ASK SOCIAL HELP	-.34	-.39*	-.33	-.46*	-.52**	-.57**	-.47**	-.47**
% TIME IN COOPERATIVE PLAY	.33	.39*	.29	.33	.51**	.46*	.45*	.39*
% TASKS COMPLETED SUCCESSFULLY	.60***	.67***	.52**	.63***	.65***	.68***	.71***	.74***
% TRIALS COMPLETED SUCCESSFULLY	.18	.28	.48**	.55**	.54**	.60***	.47*	.53**
% TIME DISTRACTED	-.45*	-.37	-.52**	-.37*	-.06	-.05	-.42*	-.27
Summary Scores								
SOCIAL SUCCESS SCORE	.52**	.40*	.52**	.44*	.67***	.49**	.68***	.51**
SOCIAL DOMINANCE SCORE	.56**	.35	.54**	.34	.47*	.27	.63***	.40*
SOCIAL COOPERATION SCORE	.40*	.41*	.39*	.36	.49**	.42*	.51**	.35
NEGATIVE SOCIAL BEHAVIOR SCORE	-.17	-.19	-.22	-.19	-.17	-.14	-.22	-.14
TASK ATTACK SKILL SCORE	.30	.29	.49**	.45*	.56**	.50**	.53**	.40*
MASTERY MOTIVATION SCORE	.35	.30	.59***	.55**	.57**	.52**	.60***	.64***
SOCIAL INVOLVEMENT SOCRE	-.05	-.06	-.18	-.12	-.14	-.12	-.14	-.08
NONSOCIAL INVOLVEMENT SCORE	.15	.02	.43*	.38*	.25	.24	.32	.31
NONINVOLVEMENT SCORE	-.04	-.02	-.29	-.21	-.21	-.08	-.21	-.19
SOCIAL SKILL SCORE	.53**	.46*	.53**	.47*	.67***	.53**	.69***	.51**
NONSOCIAL SKILL SCORE	.33	.30	.53**	.49**	.59***	.53**	.57**	.46*

SLIDE 7

* p < .05
** p < .01
*** p < .001

Amount of Variance in High/Low Teacher Ratings and Class Accounted for by Executive Skill Profile Observation Variables

N = 32

		VARIANCE ACCOUNTED FOR BY:		
	ESP Observation Variables	I Teacher Ratings	II Class	III Interaction
	% SUCCESSFUL SOCIAL CONTROL PEERS	44% ***	-	-
	RATE SUCCESSFUL RESIST CONTROL	16% **	21% *	19% *
	% SUCCESSFUL RESIST CONTROL PEERS	49% ***	-	-
N	RATE ASK SOCIAL HELP	10% *	-	27% *
	% TIME IN COOPERATIVE PLAY	22% **	-	-
	RATE ASSERTS RIGHTS	16% *	-	-
	RATE COPING STRATEGIES	24% **	-	-
	% TASKS COMPLETED SUCCESSFULLY	36% ***	-	-
	% TRIAL COMPLETED SUCCESSFULLY	20% *	-	-
	% CORRECTS ERRORS	17% *	-	-
N	% TIME DISTRACTED	26% **	-	-
N	% TIME IN ASSOCIATIVE PLAY	20% *	-	-
N	% TIME IN GROSS MOTOR ACTIVITIES	15% *	-	-
N	RATE SOCIAL ACTS IN SOCIAL TIME	-	26% *	-
	RATE ATTEMPTED SOCIAL CONTROL ADULTS	-	40% **	-
N	RATE CONTROLLED BY ADULTS	-	32% *	-
	RATE POS. AFFECT IN SOCIAL TIME	-	66% ***	-
	RATE POS. AFFECT IN MASTERY TIME	-	37% **	-
	RATE NEG. AFFECT IN MASTERY TIME	-	34% *	-
	Summary Scores			
	SOCIAL SUCCESS SCORE	54% ***	-	-
	SOCIAL DOMINANCE SCORE	32% **	-	-
	SOCIAL COOPERATION SCORE	28% **	-	-
N	NEGATIVE SOCIAL BEHAVIOR SCORE	10%	-	-
	TASK ATTACK SKILL SCORE	36% ***	-	-
	MASTERY MOTIVATION SCORE	16% *	-	-
	SOCIAL INVOLVEMENT SCORE	0%	-	-
	NONSOCIAL INVOLVEMENT SCORE	2%	-	-
N	NONINVOLVEMENT SCORE	11%	-	-
	SOCIAL SKILL SCORE	55% ***	-	-
	NONSOCIAL SKILL SCORE	36% ***	-	-

observation variable and summary score. Column I in slide 7 shows the percent of variance in the teacher high/low ratings that is accounted for by the observation categories and summary scores,and the statistical significance of the factors. Column II shows the percent of variance in the child outcome scores explained by class, and Column III lists the interaction. It is interesting that those items that discriminate between classrooms are generally behaviors related to adults or to affective expression, and that, with two exceptions, these are not items that discriminate between high and low ratings. Only those observation variables that account for a statistically significant portion of the variance in either rating or class are listed on the slide. Behaviors or summary scores marked with an N in the margin have a negative relation to ratings of high competence. A comparison of the percents of variance in the high/low ratings explained by the observation instrument with the percents of variance explained by the standardized tests (MSCA and MSSST) reveals that the observation instrument accounts for as much or more of the variance in the ratings as do these tests. The comparisons will not be examined here because they were presented in an earlier paper by Pierson, Bryk and Dougherty[1] given at this conference.

A factor analysis was done on the public school observation data. The results must be considered tentative, however, because the analysis is based on data from only 32 children. The major factor appears to be a general competence factor, because it includes those social and nonsocial variables most positively or negatively related to competence in the teacher ratings and the standardized tests. The variables in the factor are also consistent with the notion of "executive skill" as the underlying basis of competence in both social and nonsocial behavior. The positive components of the factor are:

---

[1] Pierson, D.E., Bryk, A.S., and Dougherty, L.W. "A Comprehensive Approach to Evaluating Educational Progress", paper delivered to the American Educational Research Association Annual Meeting, Washington, D.C.,March 31, 1975

- percent successful social control of peers,
- rate resist peer control,
- percent successful resist peer control,
- rate of use of cooperative strategies,
- percent of social time in cooperative play,
- rate of use of coping strategies,
- percent of tasks completed successfully, and
- percent corrects errors.

The negative components are:

- rate asks social help,
- rate shows hostility,
- percent time distracted during mastery, and
- percent of social time in associative play.

Intensive examination of the patterns of behavior of individual children reveals that the negative behaviors do not usually appear together in the same child, although the positive ones often do. Individual behavior profiles suggest that there are at least three types of behavior patterns that are negatively associated with competence - a passive dependent pattern with high scores on asking for social help and high noninvolvement time, a hostile aggressive pattern with high scores on hostility, resisting rules and resisting adults, and a self-absorbed withdrawn pattern with high scores on solitary fantasy activities. A second factor in the factor analysis suggests that hostility is related to large amounts of time spent in social activities, small amounts of time spent in mastery tasks, and high negative affect in mastery. A third factor suggests that solitary fantasy activity is associated with a lack of success in social control of both adults and peers, and lack of success in competition with peers. Asking for social is associated in another factor with small amounts of time spent in social activities, low hostility, high rates of bwing controlles by peers, and large noninvolvement scores.

A final bit of data concerns age differences. A comparison of age differences in social and nonsocial behaviors was possible in the Sesame Street study because both four and five-year-old children were included in the sample.

(slide 8 - age differences in general Executive Skill Scores)

Slide 8 shows the average Social and Nonsocial Skill Scores of the 45 children in the Sesame Street study, grouped by age. The first group (of 7 children) is between 4.0 and 4.5 years old with an average age of 4.3, the second group (of 16 children) is between 4.6 and 4.11 with an average age of 4.7, the third group (of 14 children) is between 5.0 and 5.5 with an average age of 5.1, and the oldest group (of 8 children) is between 5.6 and 5.11 with an average age of 5.7. The data listed below for comparison shows that the 32 public school children, with an average age of 5.9, had average Social and Nonsocial Skill Scores comparable with the oldest Sesame Street group. The 15 public school children, who had been rated high in competence by their teachers, had somewhat higher scores - an average of 5.95 for Social Skill and an average of 5.31 for Nonsocial Skill. The 17 children, who had been rated low in competence, had somewhat lower scores - an average of 4.55 for Social Skill and an average of 4.01 for Nonsocial Skill. More detailed age comparisons are still being analysed, but, because of the lack of randomness in both the Sesame Street and the public school samples, all such comparisons must be considered tentative. Sex differences are also being examined in both studies, but these will also have to be considered in the light of the rather strong biases in the samples.

SLIDE 8

SOCIAL AND NONSOCIAL EXECUTIVE SKILL OBSERVATION SCORES GROUPED BY AGE

Sesame Street Sample

N = 45

AGE	AVERAGE SOCIAL SKILL SCORE	AVERAGE NONSOCIAL SKILL SCORE
4.0 - 4.5 YEARS AV. AGE = 4.3 N = 7	3.96	1.39
4.6 - 4.11 YEARS AV. AGE = 4.7 N = 16	4.76	2.82
5.0 - 5.5 YEARS AV. AGE = 5.1 N = 14	4.83	3.24
5.6 - 5.11 YEARS AV. AGE = 5.7 N = 8	5.31	4.68

Brookline Sample

N = 32

AGE	AVERAGE SOCIAL SKILL SCORE	AVERAGE NONSOCIAL SKILL SCORE
5.3 - 6.5 YEARS AV. AGE = 5.9 N = 32	5.25	4.66

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APPENDIX I

OBSERVATION MANUAL FOR
THE SOCIAL AND NONSOCIAL EXECUTIVE SKILL PROFILE
FOR PRESCHOOL CHILDREN

MANUAL FOR
THE
SOCIAL AND NONSOCIAL EXECUTIVE SKILL PROFILE
FOR
PRESCHOOL CHILDREN

Martha B. Bronson
Harvard University
January, 1974

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SOCIAL AND NONSOCIAL EXECUTIVE SKILL PROFILE FOR PRESCHOOL CHILDREN

I - RATIONALE

The Social and Nonsocial Executive Skill Profile is designed to measure the preschool child's functional level of competence in social interaction and in coping with tasks. The underlying hypothesis of the Profile is that the concept of "executive" ability or skill can be applied to both social and nonsocial behaviors related to competence. The term "executive" is used in the information processing sense of "executive routines" or "programs" which organize and guide incoming and outgoing data. It implies skill in recognizing or identifying cues in a situation, skill in predicting possible sequences of events and outcomes of a situation, and skill in controlling both the self and the social or material "other" in a situation in order to effectively reach chosen goals.

NONSOCIAL SKILL is defined as skill in choosing and coping with tasks. It requires the ability to select tasks appropriate to one's level of skill, to organize task relevant materials, to use effective coping strategies, to resist distraction, to notice errors and to correct them or to effectively summon help, to try repeatedly (persist) when necessary, and, ultimately, the ability to reach a chosen goal successfully. SOCIAL SKILL is defined as the ability to control and direct oneself adequately and constructively in social situations and the ability to influence others effectively in socially approved ways. Since approved methods of social control of others vary with the culture or sub-culture, any assessment of a child's competence in this area necessarily implies value judgements. The judgement implicit in the categories of this Profile is that a general attitude of negotiation and reciprocity in dealings with others is a desirable goal and standard of measure for the preschool child's behavior. It is assumed that the ability to assume this attitude and to exhibit effective give and take (reciprocity) in social situations is emergent during the preschool and early primary school years (whether this emergence is explained by a decline in "egocentrism" or by a growth in the number of effective social strategies at the child's command). The ability to adjust to the goals and personalities of others while retaining one's own identity and goals is thought to be basic to reciprocity. This implies the ability to control or influence others with effective but non-violating strategies (physical force is considered to be a strategy which violates the social other and therefore does not show an attitude of negotiation and reciprocity), and the balancing ability to be reasonably influenced by the group without being totally overcome or dominated by others. The ability to assert one's rights and sometimes, though this is rarer during the preschool years, the rights of others is also considered important because it is assumed to reveal an awareness of general rules for social interaction which apply across specific social situations and independently of specific individual wishes - e.g. social contract rules. Specific strategies which facilitate and sustain social interaction and promote cooperation, such as sharing, helping, trading, combining resources etc. are especially noted.

II - USE OF THE PROFILE

The Social and Nonsocial Executive Skill Profile is designed for use with children between the ages of three and six years. The length of the observations can vary with the way the Profile is used (outlined below), but ten or fifteen minute observations are recommended for naturalistic settings because they usually allow for the completion of at least one activity and at least one change of focus. The Profile can be used in several ways. First, the child's general level of functioning in the natural setting can be assessed by observing and recording the child's behavior in randomized time samples. The natural setting can be the home or the school, but the preschool setting is recommended for this Profile because of the increased opportunities for social interaction. Second, selected behavior samples may be observed and scored. Three observations starting at the beginning of a social interaction, and three observations starting at the beginning of a mastery task (i.e. six observations per child) seem to give a reliable behavior sample. They provide a picture of the child's level of functioning in both the social and nonsocial areas with much less observation time than the randomized method. Third, specific controlled tasks or play situations may be constructed and the child's behavior during these sessions may be observed and scored. The second method, controlled observations in the natural setting, is the recommended use of the Profile. Each of the observations should be done on a different day over a period no less than two weeks and no more than one month.

III - DESCRIPTION OF THE PROFILE

The observation technique in the Profile is a modified time sampling procedure. Each horizontal line of the observation sheet represents a fifteen second interval. Double horizontal lines represent one minute intervals and are included for ease of discrimination in scoring. The beginning of each interval is signaled by a sharp click from an electric timer into an earphone worn by the observer. The timing device is light and worn about the neck so that the observer can easily move about (Leifer and Leifer, 1971). Continuous events are recorded by a vertical line extending over all the intervals the behavior occurs; isolated events are recorded by checks or letters as indicated in the instructions. Thus, the final record shows the frequency with which events occurred and the length of time over which they continued.

The observation sheet is divided into five parts. The ACTIVITIES section is for a brief written narative record of the ongoing activities of the child. Specific actions, interactions, and the objects of interactions are noted next to the chicks and letters in specific scoring categories, but the written narative helps integrate, clarify and interpret the specific recorded events. At the end of each observation period a more expanded and detailed narative description is written by the observer on the back of the observation sheets. The FOCUS section indicates the direction or goal of specific activities. The direction or goal is categorized as social or non-social and is further classified into one of three "types" of social or non-social activity. The "type" of a specific social or non-social activity is noted at the beginning of a time line in this section indicating the duration of the activity. The NONSOCIAL SKILLS section includes categories for those activities which are thought to be positively or negatively related to task competence. The SOCIAL SKILLS section includes categories for those activities which are thought to be positively or negatively related to social competence. Not all social or non-social activities are recorded in the skill sections. The selection of categories to be scored was based on two criteria: (1) The theoretical and/or observed (in previous research or in the development of this instrument) importance of a particular skill in the assessment of competence and (2) the discriminability of the category for reliable scoring. The AFFECT section gives an indication of the child's emotional responses or "feelings" in particular social or non-social situations. Category selection was based on the same two criteria as in the skill sections. The difficulty of discriminating among specific affective responses led to the pooling of such responses in the broad positive and negative categories. Only pride was retained as a specific response because of its special relevance to task competence.

IV - GENERAL INSTRUCTIONS AND CONVENTIONS

Preliminary Instructions:

1 - Before observing specific children make a list of all the general "ground rules" of the school or homs. Ask the responsible adult(s) and check their responses with your own observations

2 - Make several preliminary observations in the school or home before scoring so that you will be able to identify specific and relevant features of the social and physical environment.

3 - Obtain a schedule of regular school or home activities so you can plan observation times accordingly.

4 - Unless the situation to be observed is controlled or structured by the experimentor, observations should be scheduled when children will have free choices about which activities to engage in.

Scoring Instructions: (Note accompanying sample scoring sheets in appendix)

1 - Specific actions, interactions, and the objects of interactions should be noted next to the checks and letters in specific scoring categories. "PM4" indicates that the object of an interaction is a male peer four years old. "PF3" indicates that the object is a three-year-old female peer. Other objects of interaction may be the teacher (T), the mother (M), the father (F), another adult male (AM) or another adult female (AF). A typical entry might read "tells PM4 to get blick" next to a check in the social control category, or "asks T to get more paint" next to a check in the ask help category. (See the sample sheets for more examples.)

2 - After observing a child for the specified period, check over the observation sheet(s) immediately to fill in all possible information.

3 - After observing a child for the specified period and checking over the sheets, write a "sketch" of the episode on the back of the observation sheet(s). This sketch should expand and fill in details from the notes in the ACTIVITIES section and should include the physical setting(s) ("art area", "block room", "kitchen" etc.), the human setting(s) (who the child was interacting with directly and who was in the general area), the sequence of events in narative form, and the general tone of the events or episodes (hostile, controlling, cooperative, competitive etc.).

4 - Double scoring - Occasionally it is necessary to double score FOCUS categories, SKILL categories, or AFFECT and SKILL categories. Double scoring on FOCUS categories occurs when an activity seems to have both social and non-social aims, and both appear to be basic to the activity. If one is clearly primary only that FOCUS is scored. The most common examples of this kind of double score occur when the child is engaged in parallel activities but is also clearly interested in a mastery activity, or when the child is engaged in a running or climbing game (often outdoors) which may have both social and gross motor goals as integral parts of the activity.
Double scoring in SKILL categories occurs because some categories like social control, controlled, and resists control are extremely general and may occasionally be superordinate to other categories. For instance, a child may assert his rights with the goal of social control ("You have to be after me because I was first in line") or with a goal of resisting control ("You can't take that truck because I had it first") or with a goal of refusing to accept rules ("I don't have to come to the circle now because I haven't finished my painting"). Sometimes a cooperation strategy is also an attempt to control or to resist control and must be double scored.
Double scoring AFFECT and SKILL categories is the rule rather than the exception because emotion usually occurs in the context of an activity.

In all cases of double scoring, connect the two scored with a line so the double score is clearly evident for later analysis. (Note the double score examples in the sample sheets.) Generally, except in the case of AFFECT categories, double scoring is to be used as the exception rather than the rule. Double score only when a behavior clearly belongs in both categories. The above examples are the most commonly used double scores.

5 - Time line vs. check (event) scoring - Categories may be scored with a check, indicating an activity under 15 seconds in length, or a time line, indicating an activity over 15 seconds in length. Some categories (all FOCUS categories and usually converse) are always scored with a time line because they imply extended activity. Some categories (dual focus, gives up, completes/no and accepts rules/no) are never scored with a time line because they activities they code are either very brief (dual focus) or are scored after the fact. The other categories in the Profile can be scored with either a check or a time line. The observer should start with a check and extend the time line below it,as in the examples on the sample sheets, depending on whether or not the activity extends over 15 seconds.

6 - Occasionally there are several events in the same category within the same 15 second time block. In this case the several scores should all be fitted into the appropriate space(s). See the sample sheets for examples.

7 - Abbreviations -

S/N - Some categories are scored for success (S) or no success (N). These categories are ask help, tries again, completes, social control, resists/ignores control, and asserts rights. S or N is placed next to the check if the event occurs in less than 15 seconds, or at the end of the time line if it continues longer. See the sample sheets.

V/P/D - Some categories are scored for whether the activity is verbal (V), physical (P), or a demonstration (D). Categories scored for all three are social control and controlled.

The distinction between controlling or being controlled by physical force (P) versus controlling or being controlled by a physical demonstration (D) make the distinction between P and D necessary. Some categories are scored only for V or P. They are follows, affection and hostility. Sometimes an activity is both verbal and physical or involves both a verbal and a physical demonstration. These would be scored VP and VD respectively. See the sample sheets for examples.

P/N - for positive or negative affect is used in this AFFECT category only.

Abbreviations for Coping and Cooperative Strategies - These abbreviations are listed under the coping and cooperative strategy descriptions and are used only in those categories. They are only convenient ways of referring to particular strategies.

V - SCORING CATEGORIES

ACTIVITIES: The ACTIVITIES section should include brief descriptions of the human and physical behavior settings (where the activity takes place and who was there) and some brief narative description of the activities. (This should be elaborated in the "sketch" completed on the back of the sheet(s) at the end of the observation. A sample "sketch" is included in the appendix after the sample sheets.)

FOCUS: The FOCUS section indicates the direction or goal of specific activities. The direction or goal is categorized as social or non-social and is further classified into one of three "types" of social or non-social activity. The categories under FOCUS are to be scored only when the child exhibits sustained directed attention and is actively, purposefully engaged (though there is a special marking for involved watching - see below), not when there is a brief encounter without engagement. All clearly focused activities should be labeled for both "type" (in the FOCUS section) and specific activity (noted in the ACTIVITIES section). See the sample sheets for illustrations. Involved watching of any social or non-social activity should be scored under the appropriate FOCUS category and marked by a circled letter W. A change of specific FOCUS to another of the same "type" without a break (for instance a change from doing a puzzle to building a tower when both are mastery activities) is indicated by a small horizontal line crossing the time line and another "type" notation (mastery in the above example) written in. There are several examples in the sample sheets. When a focused activity is interrupted by a distraction, interruption or intervening activity like going to the bathroom or getting a glass of water, the break in the time line should be closed by a circle to indicate a continuation of the original activity. Examples of this also appear in the sample sheets.

Social Focus: Any activity directed largely or primarily toward getting or maintaining contact or interaction with another person (adult or peer) is considered social in FOCUS. The object(s) of the activity should be noted generally in the ACTIVITIES section and noted specifically next to each event check (see the sample sheets). The three "type"categories for social interaction are more clearly relevant to interaction with peers than to interaction with adults. This is because interaction with adults is more often "dependent" in nature (asking help, seeking comfort, seeking protection, seeking attention) and therefore less open to analysis in terms of reciprocity. There may be some instances where adult-child interactions may be scored in the "type" categories. In general, however, the child and the adult are on different levels with very different roles in an interaction. It is much more difficult to find evidence of reciprocity in the child under these conditions, so interactions with peers are emphasized in the Profile.

Types of Social Activities:

- Parallel activities - In parallel activities the child plays near another and appears to be relating to him, but is doing so at a very "egocentric" or non-reciprocal manner. He talks at rather than to the other as if talking to himself. He does not take the information needs of the other into account nor does he really listen to or answer the other. The child's activity may relate vaguely to what the other is doing but does not relate in any integrated or organized way. Parallel activities are often both social and non-social (the non-social "type" categories are usually mastery or gross motor) in FOCUS and are then double scored.

  examples:

  - The subject is dressing a doll near another child who is also playing with a doll. The subject makes remarks about her own activity occasionally but does not check to see whether the other child is listening, nor does she modify her comments so as to interact effectively with the other. The subject also ignores the comments or responses of the other or "responds" irrelevantly.
  - The subject is constructing a "car" with blocks next to another child who is also constructing something. The subject describes his "car" to the other not noticing that the other child is deeply absorbed in his own persuits, or is actually talkihg himself.

- Associative activities - In associative activities the child interacts with another with some evidence of reciprocal responding, but at a relatively low level. The interaction does not really appear to be cooperative in any sense, not does it appear really integrated and organized in relation to the other child. Associative activities is scored when two or more children engage in a social interaction which is above the level of parallel activities but is not yet at the level of cooperative activities.

examples:

- The subject is playing with playdough at a table with another child. They talk to each other but there is no organized "game" with the materials nor any planned cooperative effort. Their comments to each other tend to be assertions and counter-assertions rather than a real discussion or conversation.
- The subject is "cooking" in a toy kitchen with another child. Both children talk about what they are making but they do not take roles or work together in any organized way.

- Cooperative activities - In cooperative activities the subject is clearly engaging in reciprocal interaction with another person (sometimes with several). The interaction is clearly organized so as to include both (or more) in some role or activity that relates to the role or activity of the other(s). Cooperative activities is scored when two or more people engage in the type of interaction in which each listens to the other and takes into account the other's ideas and wishes, and in which both sides contribute to the outcome in some obviously reciprocal way.

examples:

- The subject is building a "fort" with another (or others) and they are working together to achieve the effect. Each contribute ideas and the product clearly is the work of both.
- The subject is playing "house" with another child. She takes the role of the "mother" and the other is the "father". They stick to their roles in an organized way, perhaps cooperating in "fixing dinner" for the "baby".

Types of Non-social Activities:

- Mastery activities - Mastery activities include any type of activity directed primarily at mastering a skill (except gross motor skills), constructing a product (unless part of a socially oriented joint effort), or finding out about something. In mastery activities the subject makes a clearly focused attempt to understand or control himself or the physical environment. Mastery activities are generally considered intellectual or problem-solving activities, in which the ability to plan effectively and use effective coping strategies is very apparent.

  examples:

  - of mastering a skill - are sorting and classifying activities, doing puzzles, writing letters or numbers, learning to read, practicing tying knots or bows, practicing hammering nails, practicing cutting etc.

  - of constructing a product - are painting or coloring pictures, building things with blocks or other construction materials, making a collage, constructing something with wood at the workbench etc. (Construction of a joint product with another person is considered cooperative social activity rather than mastery, except in the rare instances where it is clearly both a social and a mastery activity.)

  - of finding out about something - are looking at books, listening to stories, exploration of the physical environment (for instance magnets, water or sand) etc. If the subject is engaging in any of these activities with others, the FOCUS is probably social rather than non-social, unless the child is doing the activity as part of a group who are all engaged in the mastery activity (like listening to a story as part of a group, or learning about magnets with a small group and the teacher).

- Gross Motor activities - Gross motor activities are those activities which involve the whole body in some organized and directed way. Practicing physical skills such as climbing, jumping or dancing should be listed here is clearly a focused activity. The aim of a gross motor activity should be "athletic" rather than mastery oriented. Some activities, like constructing with blocks, involve the whole body but,since constructing a product is the aim, are acored as mastery activities. Gardening is another example of this kind of mastery activity.

  NOTE: Some gross motor activities seem to be mere tension release behaviors (usually when the child is otherwise involved in an ongoing social or non-social activity) and others seem to be general indicators of "state" (excited jumping or running) rather than a focused activity. These should not be scored at all if they occur outside of a focused activity, or during a focused activity but do not interrupt it. If they interrupt a focused non-social activity, they are scored distracted.

  examples:

  - The subject practices walking on a balance board, or tries to see how high he can jump.
  - The subject climbs on the jungle gym, swings on the swings, or repeatedly slides down the slide, obviously for the sake of the activity itself and not as a part of a game with others.
  - The subject dances either alone or in a group but clearly "doing his own thing" (not organized group dancing in which the aim is social).

- Fantasy activities - Solitary fantasy or solitary role play is scored as fantasy in the non-social FOCUS section. Fantasy activity involves imagining the self or the situation to be different than it is, but not as part of a game with others. Fantasy activities often reflect social and/or emotional concerns of the child.

examples:

- The subject pretends that dolls, toy animals, puppets, etc. are "alive" and makes them move and talk.
- The subject makes toy dinosaurs or toy soldiers "fight".
- The subject engages in solitary "dress up" and /or role play (pretending to be a fireman by riding on a toy truck with a fireman hat on and making siren noises).
- The subject stages scenarios with the doll house and tiny dolls and/or animals.

NONSOCIAL SKILLS: This general section deals with the child's ability to plan and carry out activities. The categories under this section apply primarily to nonsocial FOCUS activities. The section includes categories for those activities which are thought to be positively or negatively related to competence in coping with tasks. NONSOCIAL SKILL categories relate most clearly to a mastery FOCUS and least clearly to a fantasy FOCUS in the non-social section. This is because it is assumed here that NONSOCIAL SKILLS are most clearly revealed in mastery activities. Fantasy activities are included in the non-social FOCUS section because they reveal the ability to use symbols in play and are perhaps related, as Piaget suggests, to the child's incorporation of data from the environment into his mental structures. Since the NONSOCIAL SKILL categories are not as clearly relevant to solitary fantasy activities, the observer should describe the fantasy activities carefully in the ACTIVITIES section. Except for notice novelty/discrepancy and ask help, the categories under NONSOCIAL SKILLS should be scored only when the child is engaged in non-social activities. This is because it is assumed that the primary relevance of these categories to competence lies in their relation to non-social activities.

NOTE: All categories in all sections should be scored only if they clearly apply. If in doubt, do not score.

Executive Skill categories:

- Coping strategies - Coping strategies are considered to provide behavioral evidence that the child has, on some conscious or unconscious level, a plan of attack for a task or a hypothesis about how to proceed in the situation. A check in the appropriate space and/or the relevant initials should mark the occurrence of a coping strategy. (See the sample sheets for examples.) Occasionally a strategy may continue longer than 15 seconds and should be scored with a time line. Each separate use of a strategy should be marked as a separate strategy rather than the continuation of the same strategy, even if (like scanning carefully or choosing consistently) it occurs a number of times during a task. This is because the child's behavior is the only evidence of the presence of a strategy, and each behavior constitutes one piece of evidence. Coping strategies to be scored in this Profile are:

  - GAM - "Gathering Materials" - is scored when the child gives evidence that he forsees the requirements of a task by gathering together relevant materials before beginning. GAM is scored only when more than one piece of material is necessary to the task.

    examples:

    - The subject brings crayons and paper, or paper, paste and scissors together before beginning the task rather than having to interrupt the task to get forgotten but necessary materials. (The child may get a new idea necessitating additional materials later in the task and still have organized well at the beginning.)

  - CS - "Choosing Site" - is scored when the child gives evidence of the ability to forsee task requirements by choosing an appropriate site for task accomplishment.

    examples:

    - The subjects finds a quiet place to look at or read a book.

- The subject finds an area large enough for a task that requires considerable space.
- The subject finds an area secluded enough for a task requiring a great deal of concentration (a place where others won't wittingly or unwittingly interfere).

- GRM - "Grouping Materials" - is scored when the child gives evidence of having a plan or having task attack skills by grouping materials according to some clear criterion either before beginning or during a task. The behavior may reflect a hypothesis about the nature of the task, or may be a strategy to develop a hypothesis by seeing how the materials may be grouped.

  examples:
  - The subject lines up assembled materials in some way relevant to task requirements, such as putting water near paints and brushes.
  - The subject separates materials that might interfere with each other such as "dry" and "wet" art materials.
  - The subject groups pieces by size, shape, color, straight edges (as in a puzzle) etc. either before beginning a task or during a task.
  - The subject groups "finished" parts of a task apart from "unfinished" parts of a task.

- NF - "Notices Features" of a task - is scored when the child gives some behavioral evidence (often verbal) of recognition of features that are or might be relevant to the task. Sometimes the child seems to know what features are relevant and sometimes he seems to be trying to find out the requirements of the task by taking note of possibly relevant features.

  examples:
  - The subject notes (verbally) that some of the faces in a face matching task "don't have a mouth".

- The subject notes (by word or gesture) that certain blocks or pieces have "funny" markings or look alike or have holes etc.
- The subject notices that a plant he is watering has too much water already.

- CF - "Checking Feedback" (or "testing choice") - is scored when the child gives evidence of checking or testing specific behaviors or materials against some standard. This may indicate the presence of some hypothesis about the nature of the task or may show that the child has a criterion or "standard of excellence" for performance.

examples:
- The subject checks the size of pieces in a grading task, perhaps holding two pieces up together to see which is longer.
- The subject checks letters or numbers he has written aganist a model.
- The subject checks his own behavior against that of a teacher or peer when physical imitation is required (as in learning a dance).

- AFC - "Arranging Feedback Contingencies" - is scored when the child gives some evidence of an ordered attempt to get corrective feedback and/or to control errors in a task. This involves a self-imposed or self-proposed monitoring system usually used in an unfamiliar and/or particularly complex task when the child has no clear hypothesis about the nature of the task.

examples:
- The subject systematically tries each piece (of a puzzle for instance) for fit or congruence in a controlled trial and error manner, putting aside those he has tried.
- The subject says to the teacher (T) or another "You tell me if it's not right, OK." (This would also be scored ask help.)

- CSDC - "Careful Scanning or Delayed Choice" - is scored when the child gives evidence of "reflection" or deliberation in his behavior, indicating a careful consideration of alternatives or a search for a particular piece that fits with his hypothesis or plan.

  examples:

  - The subject spends some time in looking at all the pieces in a puzzle or matching task and deliberately chooses one, rather than, for instance, quickly picking up the one nearest at hand.
  - The subject shows careful choosing and comparison of pieces that might fit his design or plan in a block building task (or any construction task).
  - The subject carefully chooses colors or materials in an art task.

- CC - "Consistent Choice" - is scored when the child gives evidence of the operation of a hypothesis or plan by rule-governed behaviors, even if there are rule-governed mistakes. Usually rule-governed choices occur during problem solving attempts, but clear sticking to a plan in an art or construction project (announced beforehand in some way) is also scored. The behavior gives an impression opposite to that of either random or trial and error choices. Very often the child picks the "right" piece every time showing clear evidence of plan. Sometimes he has not really solved the problem but chooses consistent "likely" pieces. Each group of consistent choices (those based on color, for instance, or those based on size) is scored as a separate use of this coping strategy. The strategy is often accompanies by CSDC (above) but both should be scored separately.

  examples:

  - The subject finds and places all the edge pieces of a puzzle.

- The subject consistently chooses the larger pieces, or those with approximately the right shape to fit a slot.
- The subject consistently picks the right piece to come next in a grading task.
- The subject consistently picks the green pieces (though this is wrong) in a task (but this should reflect the operation of a hypothesis as far as the observer can determine rather than perseveration - if in doubt do not score).
- The subject announces that he will "make a boat" at the workbench, and he does with much persistence. The goal of the activity must be clear at the beginning for this strategy to be scored.

- VR - "Verbalizes Rule" or plan - is scored when the child gives evidence of an hypothesis of plan in his comments either to himself or to others. VR is a verbal version of CC (above). Verbalized rules or plans are not considered necessarily "better" than non-verbalized rules or plans, but they are observable behaviors and can therefore be used as evidence of strategy and scored.

  examples:
  - "I've got to find the biggest one next."
  - "That puzzle has got to look like the picture on the box."
  - "All these have to be the same" (in a matched pairs task).
  - "All the red ones go together."
  - "I'm going to start this (task) all over again" (because there were too many errors or because he wanted to do it again).
  - "I'm going to build a car (paint a tree, write a page of eights etc.) - carrying this out would be scored CC. Only specific specified goals, not general goals ("I'm going to play with clay"), should be scored.

- CD - "Corrects Discrepancies" from a rule or a plan - es scored when the child gives some evidence that a hypothesis or plan has been generated in mid-task bu correcting past deviations of errors in an ordered rule-governed way. This is not to be confused with the category corrects self (see below) which scores every instance of undoing an error. Many corrects self in a sequence may occur when the child is using the CD strategy, but the mere presence of a corrects self does not indicate that the child has a strategy. (Note the examples below.)

  examples:

  - After finding a right peg to fit a hole, the subject corrects or at least takes out all the other non-fitting pegs he had put in before and left in.
  - After finding two pieces of a puzzle that fit together, the child takes apart all the wrongly fitting pieces that he had done before.
  - As if "discovering" something, the child suddenly takes apart all false "matches" he had done in a matching task.

NOTES: All strategies must be the child's own idea. If the teacher or another child tells him what to do there is no score. If the teacher or another child is controlling the subject in a task (except in response to the child's requests for help) the activity is scored under social FOCUS rather than non-social, and SOCIAL SKILLS categories are used rather than NONSOCIAL SKILL categories.

- The instrumental use of adult (or other) help in a non-social task can be a strategy for coping with the task, but it can also indicate a lack of independent effort, so it is scored separately under asks help.
- The success or failure of coping strategies should not be noted because the judgements required would be too subjective and sometimes impossible. Evidence of the effectiveness of strategies is shown in the success or failure of the trials (tries again) which accompany and are connected with them.

- Notice Novelty/Discrepancy - is scored when the child takes clear note (usually verbal) of something new or unusual in his environment. Distractability, or rushing from one thing to the next without real direction or control is not what is meant by "noticing novelty". This category is scored only when the child gives some behavioral indication that he is surprised or interested because his inner "map" or set of expectancies about the environment has been violated. It must be clear from the child's behavior that he had a set of expectancies. This behavior appears to be relatively rare, but when it occurs it gives an indication of the child's alertness to the environment and his expectation of being abot to predict what will happen in it. Children who are confused or overwhelmed by their environments do not seem to act in this way. Noticing novelty or discrepancy in the contest of a task is a coping strategy. When it occurs outside a cirected task contest, or is not directly related to the task, it is scored under notice novelty/discrepancy.

  examples:

  - The child notices changes in the environment: "Hey, you got a new building set", "These shelves are all turned around", "Why isn't Miss Jones here today?".
  - The child notices unusual events: "Hey, the magnet doesn't stick to this" (if this occurred during an organized "task" of working with magnets it would be scored under coping strategies as NF or "notices features" - otherwise it is scored here), "Tommy still has his boots on but he's inside", "Look, the wind is blowing the rain sideways", "That dog made funny footprints in the snow", "I can see the moon but it's daytime", "There's still some juice on the floor; you didn't get it all up".

- Distracted - is scored when there is any change of focus from ongoing directed activity that is not the result of a demand interuption (see category below). It is thought to show an inability to maintain control over attention and therefore has a negative relation to task competence. The result of distraction may be a change of focus (leaving the ongoing task uncompleted), or a return to the task (in which case the hiatus is shown by a circle interrupting the time line in the FOCUS section as shown on the sample sheets) The length of the distaction is also shown by a time line in the appropriate distracted category spaces. Distracted is only scored when the child is involved in a clearly focused non-social task.

examples:

- The child's attention wanders from the task at hand to events in the surrounding environment, but not in a monitoring sense (as in dual focus) or because he is interrupted.
- The child's own behavior (his posture, lack of balance, inability to hold a pencil effectively etc.) distracts him and he shifts attention away from the task at hand.
- The child seems to "lose his hold" on the task without turning his attention to any clear alternative. Sometimes he simply stares off into space.

- Interrupted - is scored when there is a clear external demand and the child is distracted from his task. The demand may come from another person (the teacher or another child calling his name) or may come from events in the environment that most people present attend to (a fire alarm, thunder and lightning, the arrival of a group of new people or things at the door). The interrupted category gives an indication of the impingement of the environment on the child and his reaction to this impingement. Returns to task focus after interruption are thought to be an indication of persistance. The child may also try to ignore an interruption and this should be noted in the ACTIVITIES section. Interruptions should be scored with checks or time lines (depending on the duration) like distractions. If the interruption ends in a return to the original focus of activity, the hiatus in the time line should be shown with a circle as in the case of distraction. If there is any doubt about something being an interruption, score it as a distraction.

examples:

- The teacher calls to the child to come and get something, or to come get dressed to go outside.
- A passing child bumps into the subject violently.
- A child pops a balloon or makes a very loud noise in the area.
- A person arrives bringing the school Christmas tree for decoration.

- Dual Focus - or "dual attention" (White, Watts et al., 1972) involves the ability to attend to the task at hand without losing track of the surroundings - the ability to monitor the environment without losing the primary focus. It probably indicates the child's ability voluntarily control his attention. In dual focus the child appears to take note of his surroundings (looks up briefly, smiles or frowns at an event outside primary focus, makes a brief comment) without losing his hold on his central task. This is distinguished from the distracted category by whether or not the child loses his hold on the task at hand. Dual focus is always scored by a check and never by a time line because the behavior is by definition very brief.

examples:

- The child is practicing writing his name when somebody near him mentions that it is Tuesday. Without looking up or stopping his lettering, the subject says "No, it's Wednesday" (and is probably right).
- The child is engaged in a sorting task but glances up briefly when someone drops several objects with a clatter as if to "check out" the event. He does not stop sorting however.
- The child is arranging cuisinaire rods in a symmetrical design while a child nearby is telling a riddle to several listeners. The subject smiles on hearing the answer to the riddle (perhaps even makes a comment) without stopping his work with the rods.

NOTE: The above three categories all deal with the child's ability to effectively control and direct his attention, and to persist in a task regardless of normal environmental events around him. Distraction shows a lack of control, interruption challenges the child's control, and dual focus shows a high level of control.

- Ask Help S/N - is scored when the child specifically asks for help from another person (adult or child). It must be the child's initiation. Help gratuitously offered during a task should be scored as an interruption if it succeeds in interrupting the child, or as controlled if the other succeeds in directing the child's behavior. (The child may also resist the control, respond with hostility etc.) Next to the event check, note from whom the child asks help and whether or not the child is successful (S) or not (N) in getting help. (See the sample sheets for proper scoring method)

  examples:
  - The child asks the teacher for materials or asks where certain materials are to be found.
  - The child asks how a certain mastery task is to be done, or asks for help in the midst of a task because he is having trouble.
  - The child asks for help in restraining another child who is bothering or hurting him.

- Corrects self - should be scored any time the child corrects an error in a task he is doing (mastery or gross motor). Sometimes this just means taking apart something he has put together wrong or wiping up a spill. The child may try a piece of material in a certain place (scored tries again), see that it doesn't fit in some way, and immediately remove it (scored corrects self). Usually, corrects self will follow a tries again marked N for "no success" (in the trial), but occasionally the child will "correct" something that was not a mistake (take out a correctly fitting puzzle piece for instance). The latter case is indicated by a corrects self that follows a tries again check that had an S for "successful". A line should connect corrects self to the tries again he is correcting. (See the sample sheets for examples.) This category is a measure of the child's ability to notice his own errors - to make effective use of negative feedback in a task. Spontaneous verbal self-corrections and physical skill self-corrections should also be scored.

examples:

- After the child has tried to force a piece into a slot, he sees that it doesn't fit and removes it.
- The child is trying to tie his shoe, but notices he has made a knot in the laces and undoes it.
- The child notices that he has laid out a picture up-side-down and turns it over.
- The child is saying a nursery rhyme. As he recites he notices that he has said one line wrong and spontaneously corrects it.

- Gives up - is not scored for all non-completed tasks (because the child may simply become distracted) but only for those where the child obviously gives up a chosen goal. The child may become tired because the task seems too long or too hard, or he may give up out of a sense of failure and/or frustration.

examples:

- The child has been working on a painting but cannot seem to get it right. He takes it off the easel, perhaps even tears it up, and does not try again.
- The child has been trying to make a tower of blocks but they keep falling down. He stops trying finally and either leaves them there or puts them away, but definitely "gives up". There is usually some accompanying negative affect in gives up.
- The child is trying to make the number "8" on a paper but cannot make it look right. After several trials he gives up and does not complete the task or seek help.

- *Tries again S/N* - is a measure of the number of trials needed to solve a problem or complete a task for which there is a possibility of "success" (S) or "no success" (N). Art and construction projects are not scored this way unless there is a clear measurable goal or sub-goal - e.g. mixing a certain color or cutting paper into strips - connected to the activity. Each attempt to reach the goal is scored as a "trial" (*tries again*) even if a particular behavior (trying a puzzle piece) is repeated many times. *Tries again* is both a measure of task difficulty (how many tries it takes) and persistence. Each *tries again* check should be marked S for success or N for no success if this can be determined.

  examples:
  - Each attempt to find a "match" in a matching or sorting task is a *tries again*.
  - Each attempt to jump over a barrier in a *gross motor* task is a *tries again*.
  - Each attempt to tie a bow (these trials may take longer than 15 seconds and require a time line) is a *tries again*.

- *Completes/No S/N* - is scored when some discernible completion of a non-social task occurs. It can involve either finishing the task at hand or putting away the materials. Completion of a task is relative to the original goal - e.g. if the child's goal was to write one letter "A" then doing one "A" is sufficient for a *completes* S (for success) score, but if the goal was to do a page of "A's" (probably for an older child), then doing only one would be scored N for "no completes". The child's goal can usually be determined from verbal or contextual cues. A *completes* score is always a check rather than a time line because it is scored only after the fact (after the completion has or has not taken place) rather than during the process of finishing a task or cleaning up. Note that a *completes* score may not mean completes successfully (though it usually does). Most activities may have two *completes* scores because cleaning up materials or putting them away is functionally separate and scored separately from the original task. For instance, constructing a house with blocks or lego can be "completed" and putting away the blocks or lego can be "completed". No for "no completes" is scored any time the child leaves the task without winding up in any way. This may involve deserting the task completely or changing focus in mid-stream without any "end" to the provious activities. The child may also score No for failing to complete a task, but get a subsequent check for putting the materials away. All checks should be scored S for success or N for no success, but all No scores are assumed to be unsuccessful. Indicate next to the score what the child actually did (e.g. "finished puzzle" or "put puzzle away"). Sometimes there may be more than one completes with one set of materials. The child may draw several pictures, completing each before putting away the materials. He may also do several structures with blocks or do one puzzle several times successfully. Each of these activities would have a separate completes score. (See the sample sheets for examples.)

examples:

- The child completes a matching task successfully (getting a check and an S in the appropriate space) then does not put it away. If putting materials away is expected in the environment, he then gets No in the appropriate space.
- The child tries to write his name but stops after the first two letters (scoring No). He then puts the materials away (scoring a check with an S).
- The child finishes a counting task successfully (check plus S) and then puts the materials away (another check plus S).

SOCIAL SKILLS: This general section deals with the child's ability to cope effectively with social interactions - that is, to control and direct himself adequately and constructively in social situations and to influence others effectively in socially approved ways. The section includes categories for those activities which are thought to be positively or negatively related to social competence, but the categories may be scored even when the child is not involved in a specifically social FOCUS activity (e.g. parallel, associative, or cooperative activities). Some scorable behaviors occur when the child is not involved in any really focused activity, or occur in the midst of some essentially non-social activity. For instance, a child may compete with another in a mastery activity of follow (imitate) another in a gross motor activity.

Social Skill Categories:

- Converse - is scored when the child carries on a conversation with another person (adult or child) with the primary intent (indicated by the verbal content) of communicating with the other (rather than controlling, seeking help etc.). Converse usually continues more than 15 seconds and is therefore scored with a time line. It is considered to be evidence of an attitude of reciprocity since the child must listen as well as speak and respond reasonably approoriately for the conversation to continue. Converse is always scored under social FOCUS as cooperative activities.

examples:

- Two children discuss holiday preparations (Holloween, Thanksgiving, Christmas etc.) going on at their homes.
- Several children discuss the trip they have taken to the zoo (the emphasis here is on discussion vs. collective monologues).
- Two or more children (usually two in most cases of converse) talk about their parents or their sibblings.
- A child discusses an experience (thought, feeling etc.) with an adult (as long as the discussion is reciprocal not controlled and directed by the adult).

- Social Control V/P/D: Success (S)/ No success (N) - Social control is scored when the child attempts to control or manipulate others or to get their attention. The object of the attempted control should be noted next to the score. V is scored when any attempt to manipulate or influence others by the use of words is made. Everything from "I won't be your friend if you don't...." to "We'll get in trouble if we...." or "Get me that block" or "I know a good game; you be the indian and I'll be the cowboy" (this last control effort would also be scored as a cooperation strategy - see AR "assigns roles" below) is scored here. The success (S) or failure (F) of the control attempt is indicated by a following S or N. If the attempt occurs in under 15 seconds VS or VN would be listed in the appropriate space together; otherwise the S or N should be marked at the end of the time line (see the sample sheets for examples). P is scored when the child tries to influence, manipulate or control others by means of physical force like pushing, dragging, hitting, biting etc. P is scored only for physical coercion but may be double scored if used in conjunction with verbal direction (e.g. VP plus S or N in the social control category space) or double scored for category if the coercion is also hostile (see AFFECT categories below). D is scored when the child tries to influence others by means of modeling or some form of demonstration. This is scored for success or no success as above.

examples:

- "Go get me that book" with a shove in the desired direction is scored VP and an S or N added depending on whether the child does it.
- "I'll show you how to do that", with a demonstration, is scored VD. It may not be possible to determine S or N in this case. This is occasionally true in any social control case. This behavior may also be scored as a cooperation strategy (see H "helps" below) depending on the circumstances - e.g. the child may also be simply interfering.
- The child hits another to make him go away - scored P with S or N and probably also scored as hostility depending on the circumstances.

- Competes S/N - is scored when the child attempts to be superior or show his superiority, in any way or for any reason, to another. Note the specific behavior next to the check in the category space. There may be competition for the attention of another, for resources, to "win", to "be first", or to achieve skills. Success (S) or no success (N) in these attempts is scored (if determinable) either with a check to indicate an activity under 15 seconds or at the end of a time line. Score this category only when the child seems clearly aware of the competition - not, for instance, when he is trying to get attention or help and others just happen to be getting or keeping the object's attention and the child doesn't seem to notice it or to modify his behavior. Sometimes the child's statements, such as "I can do it faster (or better)" or "I'll get there first", clarify the intent. If in doubt, do not score.

  examples:
  - The child says "I'm going to get more (resources) than you" to another child.
  - The child says "I can do that better than you" or Mine is better than yours" to another.
  - Clear, intended striving with others for attention such as "Look at mine, look at mine" or "I get to do it today...no me...no it's my turn" as scored as competes.

- Follows V/P - indicates physical (P) or verbal (V) imitation or literal "following" of another (adult or peer - note who next to the score). P is a measure of direct or immediate, rather than deferred, imitation of physical acts and suggests the immediate effects of social others on the individual. Physical "following around" of adults or peers is also included. This category is an attempt to get at the child's sense of himself as a separate entity. There is some indication (White, Watts et al., 1972) that direct imitation or following is typical of younger or less mature children. V is scored when there is a direct verbal imitation of a single individual or in "group contagion" or when the child indicates following by verbal expression ("I'll do that too", "Then he won't be my friend either", "Then I'll have juice too"). Follows is scored only when the child follows or imitates another and that other has given no explicit (usually verbal) indication that the child is supposed to imitate or follow. Following or imitation in response to explicit direction is scored under controlled (see category below). Follows is always spontaneous.

examples:

- The child joins in a group chant such as "John is a baby" or "Time to clean up".
- The child sees another making faces in the mirror and imitates him.
- The child hears another saying a nursery rhyme and begins to say the same one.
- The child follows another into another room without an invitation or command such as "Come on" or "Let's go".
- The child shows spontaneous acceptance of another's attitudes, decisions or conclusions - "I don't like her either", "I don't want to come to your birthday party either", "I'll be a monster too".

- Controlled V/P/D - indicates that the child is being successfully manipulated, or directed verbally (V), physically (P), or by gesture or demonstration (D). Indicate who is doing the controlling next to the mark in the appropriate space. Note that a V, P, or D for controlled is scored only when a control attempt has been made and the child goes along with it. He can also resist control (see below). Sometimes the child is controlled by a combination of methods (VP, VD, etc.).

examples:

- Another person says "Go get me that sponge" or "You be the bad guy" and the child obeys.

- Another child grabs a toy away from the child and he either does not resist or does not resist successfully.
- The child is controlled by a gesture - for instance when another child makes a "come here" gesture, a "go away" gesture, a "shhhhh" gesture etc., or when a teacher demonstrates something the child is supposed to do.

- Accepts rules/No - indicates the child's response to the physical and social constraints of the setting. The observer should have a list of all ground rules of the setting before scoring. Other scorable rules are those involved in a game or those imposed by the teacher for a specific activity. Accepts rule/No is scored when rules have recently been explicitly stated ("It's time to clean up now"), or the child has been explicitly reminded ("Sand is not for throwing, Tommy"), or game rules have been explicitly set forth("The red team can't go beyond this line"). Controlled V/P/D and Accepts rules/No can be discriminated on the basis of whether or not the request or demand is a rule of the environment or a constraint of the activity the child is engaged in. Many teacher or adult restrictions are rule based ("You can't hit in school", "You have to stand in line") but sometimes the adult uses controlling tactics that do not involve rules ("Come play this game with me now", "Please share your book with Mary", "Let me show you how to do that") and these are scored under controlled if the child obeys or under resists control if he does not. Somes a peer's request is rule based ("You are not allowed to touch my game", "Only three people are allowed to play this", "We're not supposed to go in there") and should be so scored. No in the accepts rules category indicates a chils's inability or refusal to accept the constraints inherent in a certain activity or to obey the ground rules of the environment. Only specific refusals or deliberate "violations" or ignoring rule reminders should be scored, not distracted "forgetting". Although many refusals to accept rules is probably an indication of problems in social behavior, it is not always desirable for children, even preschoolers, to accept all rules. There may be instances in which the child should assert his right (see category below) to disobey a rule or to do away with it. Such instances should be double scored under refusing to accept the rule (No) and asserts rights.

examples:

- The teacher reminds the child that he must put on an apron when he paints and the child does (scored with a check in the appropriate space).
- Sometimes, in game situations, there is an obvious self-imposition of a rule ("I'm only supposed to use the green ones,right?", or "I'm 'out' because I stepped outside the circle") and this is scored with a check. Deliberate "cheating" is scored No.
- If the teacher states that it is "time for everybody to get ready to go outside" and the child reminds her that he cannot go since he just got over a cold, the behavior would be scored under both No (for not accepting rules) and asserts rights. (As in all cases of double scores, a horizontal line should connect the two scores.)

- Resists or Ignores control S/N - is scored in those instances when a peer or an adult tries to control the child and the child does not go along with it. A score for success (S) or no success (N) is somewhat redundant since N would be indicated by a score in controlled, hewever this added information is included for clarity - so it is clear that the child tried, whether or not he was successful.

examples:

- The child refuses or ignores the request of a teacher (when the request is not a statement of a rule) to "Come and play this game now" or to "Share your candy with Timmy".
- The child refuses another's request to "Play with me",or refuses to play the way the other wants.
- The child refuses to perform a task or give up resources when asked (if neither are required by a rule).

- *Asserts rights S/N* - is scored when the child asserts or demands his rights or those of another, giving some form of justification or reason for his behavior. Some *asserts rights* behaviors must be double scored. The child may assert his rights in resisting a rule ("I don't want to drink all the juice because I had a big breakfast and I'm not humgry" should be double scored with *No accepts rules*) or in resisting the control of another ("You can't take that truck because I had it first" should be double scored with *resists/ignores control*) or in an attempt to control another ("You should let me play with that now because it's my turn next and you've had it a long time" should be double scored with *social control*). *Asserts rights* is very often an attempt to influence others or a response to others' attempts to influence the subject, and therefore is very often double scored. Sometimes *asserts rights* is a statement of principle or privilege ("You're never supposed to hit smaller people" or "I'm five now so I get to stay up till eight o'clock") and is not double scored. *Asserts rights* is important because it gives some evidence of the child's recognition that there can be reasons for actions other than his own wishes.

  examples:
  - "I don't have to share this because I made it myself."
  - "Stop making so much noise because nobody can hear the record." This would probably be double scored with *social control*.
  - "I cleaned up my part so now you have to clean up the rest."

- *Shows Sympathy/Empathy V/P* - is scored when the child shows signs of "feeling for" or "feeling with" another person. This must be clearly the result of distinguishing the other as a separate individual with feelings, rather than the result of a failure to distinguish between the self and the other (as in the group contagion phenomenon when the young child cries because he sees or hears crying). The child must give evidence of making this distinction by focusing on the feelings of the other rather than simply imitating or "catching" an emotional response from another.

examples:

- The child shows verbal (V) sympathy or empathy with statements like "I'm sorry you feel sick", or "I hope you get to go the the birthday party too" or "Sometimes I get mad at my little brother when he bothers my things too" or "I cried when my dog died too".
- The child shows physical (P) sympathy or empathy when he pats a "hurt place" on another child (where he has just fallen down or been hit etc.) or putts his arms around or otherwise physically comforts a hurt or frightened child.

- Cooperation strategies - Cooperation strategies indicate the use of reciprocity based techniques in social interaction. Power assertive strategies such as threats ("If you don't do that, I'll hit you"), or bullying ("You have to do that because I'm bigger than you are") or physical monopoly of resources ("They're my blocks, and I won't let you play with them if you don't...") are not considered cooperation strategies. Cooperation strategies may be directed at a child or at an adult. It is essential that all strategies be spontaneously initiated by or clearly reflect the intentions of the subject, rather than be the result of suggestion or coercion from another. Although ready compliance may be an indication of cooperation it is not clear that the child could or would spontaneously use the strategy on his own, so such compliance is scored under controlled rather than under cooperation strategies. Cooperation strategies are not scored for success or failure because where this kind of outcome would be relevant they are double scored for social control - e.g. where the child is using the strategy to get someone to do something. From this it follows that a strategy like "helps" (H) is seldom double scored for social control, while "trades" (T), "trades off" (TO), "play suggestion" (PS), and "assigning roles" (AR) often are. The cooperation strategies to be scored in this Profile are:

- H - "Helps" - is scored when the child indicates cooperation by helping another child spontaneously. Usually this behavior seems to be an expression of friendliness, affection or nurturance. If the child is asked to help by the teacher or the other child, the behavior is scored under controlled.

  examples:
  - The child notices another child is having trouble lifting or carrying something and offers help (verbally or non-verbally).
  - The child offers to help another clean up a "mess" or materials.
  - The child offers to help another who is having difficulty doing an intellectusl task.
  - The child comes to the aid of another who is being verbally or physically abused by another.

- S - "Shares" - is scored when the child suggests or otherwise initiates sharing his own resources or those of others. The goal may be to "get into the game", to show friendliness or affection, or to resolve a conflict. If the child responds to a conflict situation by saying "OK, let's share it" or "Let's both play with it" the behavior is scored under"shares" (and social control), but if the child is told to share by the teacher or the initiative comes from the other side the behavior is scored under controlled.

  examples:
  - "Everybody can have some of my candy" (shares own resources).
  - "Let's share the big blocks" (to resolve a conflict).
  - "We can all have some of the lego" (to get into the game).

- T - "Trades" - is scored when the child suggests or otherwise initiates a reciprocal exchange of materials, position (changing "sides"), or roles. Trading suggestions are often social control attempts and should be double scored.

examples:

- "Now you can have the truck and I'll play with the airplane."
- "Now can I be inside the fort and you be outside?" (if a trade).
- "This time we'll be the good guys and you be the bad guys" (if a trade).

- TO - "Trade offs" - is scored when the child suggests or initiates a "tit for tat" or "give something to get something" social arrangement. The usual form of this strategy is "if you do this I'll do that". The form of "trades" is usually an exchange while the form of "trade offs" is usually a "deal" or contract. This category is usually double scored with social control.

examples:

- "I'll give you the truck if you let me be the policeman."
- "I'll invite you to my birthday party if you let me play with the big doll" (note that the negative form of this would be a threat and not a cooperation strategy).
- "You can have this (dress up) hat if you let me be the mother."

- TT - "Takes turns" - is scored when the child suggests or initiates taking turns or waiting for one's turn. In "trades" each side gets something, but in taking turns the resource, position, or role must be passed from person to person and there is an element of waiting without compensation. Compliance with external requests for taking turns is scored controlled or accepts rules depending on the ground rules in the situation.

examples:

- "Let's wait in line for the juice."
- "After you, can it be my turn to hold the rabbit?"
- "You can play with the balloon first and give it to me OK?"
- "First I'll be the leader and then you can be the leader."

- CR - "Combining resources" - is scored when the child suggests or initiates joint use of material resources. This strategy is distinguished from "shares" because both (or more) parties contribute to a joint pool of resources. The strategy is distinguished from "joint effort" because the parties may not use the materials to do something together - they only have access to the same materials. This category is usually double scored with social control.

  examples:

  - "Let's both use all the blocks" (each has a certain portion and type now).
  - "We can both use all the paints, OK?" (one child has red and blue, the other yellow and green).
  - When one child has lego and the other has playdough, the subject suggests "Let's use it all together to make things".

- JE - "Joint effort" - is scored when the child suggests or initiates joining forces to produce an effect or achieve a goal - e.g. "doing it together". In "joint effort" the child must suggest or initiate working together on something or working on a common goal. This category is usually double scored with social control.

  examples:

  - The child suggests combining effort to create or construct something - "Let's paint it together" or "Let's make a big house out of the blocks".
  - The child suggests combining effort to do a job - "We can both lift this together" or "Let's clean the turtle cage together".
  - The child suggests creating a joint effect - "Let's be a train" (several children in a row) or "Let's play the (musical) instruments together and make a band".

- PS - "Play (or game) suggestions" - is scored when the child generates an idea or suggests a form for social play. This strategy is usually a social control attempt also and is double scored. It is considered a cooperation strategy because it suggests a form for activities which necessarily include others besides the self. Merely suggesting play with certain materials (unless the materials are a "game" like dominoes and require more than one person) like "Let's play with the blocks" is not considered a cooperation strategy because it does not necessarily involve others beside the self in the activity and in suggests no form for the social play.

  examples:

  - The child generates an idea to initiate social play - "Let's play house" or "Let's be princesses in a castle and the jungle gym will be the castle" or "Let's play Batman and Robbin" or "Let's make a city in the sand" or "Let's play checkers" (but not "Let's play with playdough").

  - The child generates further or follow-up suggestions during social play - "This can be a fort for the soldiers" or "This will be our house and this mat can be our bed" or "And then we can kill all the bad guys" or "After that the witch can turn them all into stones".

- AR - "Assigning roles" or resources - is scored when the child assigns roles, parts, teams,"sides" or material resources in a role-play or other game. The "assigning roles" strategy often follows a"play suggestion" strategy ("Let's play house and you be the father") but each strategy is scored separately. "Assigning roles" is usually double scored for social control.

  examples:

  - "You be the father and you be the baby and I'll be the mother."

  - "You can have the red checkers and I'll take the black ones."

  - "You bring the water and I'll get the bowls for the 'soup'."

- RS - "Rule stating" - is scored when the child either appeals to rules to facilitate social interaction or states the rules of interaction in a game. "Rule stating" (like asserts rights) gives evidence that the child is aware that activities can be governed by "laws" rather than by individual wish or whim. The child may invoke the ground rules of the environment or may make up "rules" to order the activities in a game.

  examples:
  - "We have to clean this up before we have juice."
  - "The one who get's there first wins, OK?"
  - "In this game the person with the red marbles always takes the red space."
  - "We (you) are not supposed to go out there without a teacher."

NOTE: The above categories are meant to assist the observer in recognizing cooperative strategies. A careful record of what the child did and/or said should be noted next to the event check in the appropriate cooperation strategy space. The observer can then fill out the name (initials) of the particular strategy later if pressed for time during the observation.

AFFECT: Affect is listed only as positive or negative in both individual (Affect Pos./Neg.) and social (Affection or Hostility) forms. Only Pride is included as a more specific emotion because of its possible connection with self-awareness and self-concept. Otherwise, only the positive/negative discrimination is required of the observer because of the difficulties inherent in accurate discrimination of emotions. AFFECT categories are often double scored because affect usually occurs in the context of other activities. It may accompany any of the NON-SOCIAL SKILL or SOCIAL SKILL categories. Note the apparent cause of the affect next to the score and note also the particular form of the affective expression (e.g. smiling, crying, hitting etc.).

Affect Categories:

- Affect Positive/ Negative - P (positive is scored when there is any indication of (expression of) pleasure at any time during the observation. These might include anything from smiling, laughing or singing to the self, to verbal expression such as "I like this" or "This is fun". N (negative) is scored when there is any obvious sign of discomfort or displeasure. Negative affect signs include frowns (if not from concentration), tears, and any other verbal or non-verbal expressions of anger or frustration or fear or pain.

  examples:

  - The child can show positive affect or P by: singing to himself while swinging on a swing, smiling at a friend or the mother who is approaching, making statements like "That feels good", or "I like this kind of candy" or "I love to slide down the slide".
  - The child can show negative affect or N by: sighing (under conditions of stress), screaming or crying, making statements like "I hate apple juice" or "I don't like this game" or "that hurts".

- Pride - is meant to be a measure of perceived (by the child) competence and is thought to be connected with self-concept. It may often be distinguished by its verbal accompaniment - "Look what I did", "I can do that" or "I tied my own shoes" - but is sometimes detectable in non-verbal behavior such as looking at a finished product and smiling, or showing the product to another. Expressions of pleasure upon the successful completion of a task requiring physical skill (climbing a tall ladder, jumping over a large barrier, turning a summersault etc.) should also be scored. Do not score wild boasting ("I can beat up anybody in the world") here. Note the apparent occasion for the pride next to the score unless it is clear from the context.

  examples:

  - "Look at my painting."
  - "I won!" (usually accompanied by smiles or laughter).
  - The child smiles to himself after successfully writing his name.

- Affection V/P - V (verbal) or P (physical) is scored if a child shows verbal or physical affection (if both score VP) to an adult or peer. Note the form and direction (adult or peer) of the affectionate behavior next to the score.

  examples:

  - The child can show physical affection by hugging, patting, kissing, seeking close physical contact etc. with another.
  - The child can show verbal affection by comments like "I like you" or "You are my best friend" or "you are the only one who can play with my doll".

- Hostility V/P - V (verbal) or P (physical) is scored if the child shows physical or verbal hostility (if both score VP) to an adult or peer. This may coincide with physical (P) social control and may be scored concurrently. The difference between this category and physical social control is the goal of the activity. Social control is primarily an attempt to get someone to do something and hostility may or may not accompany it. Note the form and direction (adult, child etc.) of the hostility next to the score.

  examples:

  - The child can show physical hostility by hitting, pinching, pushing, biting, or knocking over toys or materials of the other.
  - The child can show verbal hostility by comments like "I hate you" or "You are stupid" or "You're a baby" or "You're not my friend anymore".

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White, B.L. and Watts, Jean C. *et al*. *Experience and Environment: Major Influences on the Development of the Young Child*, Vol. I, Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1973.

APPENDIX

The appendix includes three sample scoring sheets (one 15 minute observation) and a sample "sketch" which would accompany the observation on the back of one or more of the scoring sheets.

Name: Jimmy D.
Age: 4.8
Sex: M
Observer: Bronson
Date: 10 / 15 / 73
Place: B. Day Care
Time: 930 AM
Obs.#: 1
Page #: 1

ACTIVITIES	FOCUS						NONSOCIAL SKILLS										SOCIAL SKILLS										AFFECT			
	Social			Non-Social																										
	Parallel	Associative	Cooperative	Mastery	Gross Motor	Fantasy	Coping Strategy GAM, CS, GRM, NF, CF, AFC, CSDC, CC, VR, CD	Notice Nov/Discrep.	Distracted	Interrupted	Dual Focus	Ask Help S/N	Gives Up	Corrects Self	Tries Again S/N	Completes/No S/N	Converse	Soc.Control V/P/D S/N	Competes S/N	Follows V/P	Controlled V/P/D	Accept Rules/No	Res./Ign.Control S/N	Asserts Rights S/N	Shows Symp./Emp. V/P	Cooperation Strategy H, S, T, TO, TT, CR, JE, PS, AR, RS	Affect Pos./Neg.	Pride	Affection V/P	Hostility V/P
Gets out puzzle and takes to table - table has paste and water on it so he moves				Mastery puzzle																										
							✓CS finds clean table																							
							✓GRM Lays out puzzle pieces																							
															✓N	Tries		piece												
														✓																
															✓N	"		"												
														✓																
							✓GRM Gathers edge pieces																							
														✓	✓N	"		"												
															✓S	"		"												
															✓S	"		"												
															✓N	"		"												
														✓																
											✓ Loud noise				✓S	"		"												
															✓S	"		"												
															✓S	"		"												
distracted by conversation near by									✓ PF3 talking to T near by																					
continues puzzle														✓	✓N	"		"												
															✓S	"		"												
															✓S	"		"												
															✓S	"		"												
															✓S	"		"												
															✓S	✓S	finishes puzzle											✓"I finished it"		
																✓S	puts it on shelf													
Wanders around looking at people and materials on shelves stops to watch PM4 doing magnet game- PM4 finishes ~~and~~ Jimmy wanders off				Mastery Ⓦ																										

Name: Jimmy D.
Age: 4.8
Sex: M
Observer: BRONSON
Date: 10/15/73
Place: B. DAY CARE
Time: 9:35
Obs.#: 1
Page #: 2

ACTIVITIES	FOCUS	NONSOCIAL SKILLS	SOCIAL SKILLS	AFFECT
	Social: Parallel Associative Cooperative Non-Social: Mastery Gross Motor Fantasy	Coping Strategy GAM,CS,GRM,NF,CF,AFC,CSDC,CC,VR,CD Notice Nov/Discrep. Distracted Interrupted Dual Focus Ask Help S/N Gives Up Corrects Self Tries Again S/N Completes/No S/N	Converse Soc.Control V/P/D S/N Competes S/N Follows V/P Controlled V/P/D Accept Rules/No Res./Ign.Control S/N Asserts Rights S/N Shows Symp./Emp. V/P Cooperation Strategy H,S,T,TO,TT,CR,JE,PS,AR,RS	Affect Pos./Neg. Pride Affection V/P Hostility V/P
PMS (ERIC) approaches Jimmy and asks him to play with the blocks with him	Assoc.		V to play with the blocks P Eric pulls him to Block area	
becomes cooperative play - TO BUILD A house and pretend to be ROBBERS in it.	Coop.		VS "I get the round ones" VS "Lets Build a house" → JE VDS "Not that way, this way" VD where to put a block VD " " " " " VN "Not like that" (PM ignores) V "I'll make my window taller" S (does it) →	P Laughs at taller window
			V to be robbers in the house V to look out the window VS This is my window because I made it.	
NEW PM4 (TOM) WANTS TO PLAY BUT J. says NO - TOM CRIES & J Relents.			VS Tom not to play → V VAR OH OK, you can be the policeman (To PM4) VDS "This is your GUN" (to PM4) VD to put hands up and keep them up	→ V "you can't pla (to PM4)
During "GUN" episode part of the "house" is knocked over and all 3 boys start to Rebuild but each gets absorbed in Building his own thing.	Assoc.		VDS "Look at my stair" → V to look at ERIC'S TOWER VP "MOVE" pushes TOM OFF his stair S	P

Name: Jimmy D.
Age: 4, 8
Sex: M
Observer: BRONSON
Date: 10/15/73
Place: B. DAY CARE
Time: 9:40
Obs.#: 1
Page #: 3

FOCUS: Social (Parallel, Associative, Cooperative); Non-Social (Mastery, Gross Motor, Fantasy)

NONSOCIAL SKILLS: Coping Strategy GAM, CS, GRM, NF, CF, AFC, CSDC, CC, VR, CD; Notice Nov/Discrep.; Distracted; Interrupted; Dual Focus; Ask Help S/N; Gives Up; Corrects Self; Tries Again S/N; Completes/No S/N

SOCIAL SKILLS: Converse; Soc.Control V/P/D S/N; Competes S/N; Follows V/P; Controlled V/P/D; Accept Rules/No; Res./Ign.Control S/N; Asserts Rights S/N; Shows Symp./Emp. V/P; Cooperation Strategy H, S, T, TO, TT, CR, JE, PS, AR, RS

AFFECT: Affect Pos./Neg.; Pride; Affection V/P; Hostility V/P

ACTIVITIES	FOCUS Social	FOCUS Non-Social	NONSOCIAL SKILLS	SOCIAL SKILLS	AFFECT
	ASSOC			✓ "UH OH" IN IMITATION OF ERIC WHOSE TOWER has fallen down	
The 2 PM's leave to go have juice + J. climbs up and down his "stair" sometimes jumping off the end		GROSS MOTOR climbing on stairs			
					P Laughs as jumps off end of stairs
					P "I'M ON TOP OF The WORLD" (ON TOP OF STAIR)
			✓ (By T) "Time to clean up now" →	✓ STARTS TO clean UP Blocks after kicking them over with angry expression	N ↑
puts blocks on shelf IN ORDERED way by size and shape		MASTERY TO PUT BLOCKS AWAY		VS "ERIC has to help me because he played with them to (to T) - T agrees to get him	
			✓ "This doesn't go here" (puts aside a block somebody brought from home that doesn't belong on the shelf)		P Hugs ERIC who arrives
ERIC Helps and they quickly finish putting away the blocks			VS (to ERIC) "Will you help me pick these up?"		
			VS Blocks all away		
				✓ to come to hear a STORY (By T)	
				VD where to sit (By T)	
TALKS WITH ERIC ABOUT BOOK →	COOP			✓ with ERIC about book to be read	
				✓ to be quiet so story can be read (By T)	

Name:
Age:
Sex:
Observer:
Date:
Place:
Time:
Obs. #:
Page #:

ACTIVITIES	FOCUS		NONSOCIAL SKILLS										SOCIAL SKILLS										AFFECT			
	Social	Non-Social																								
	Parallel Associative Cooperative	Mastery Gross Motor Fantasy	Coping Strategy GAM,CS,SRM,NF,CF,AFC, CSDC,CC,VR,CD	Notice Nov/Discrep.	Distracted	Interrupted	Dual Focus	Ask Help S/N	Gives Up	Corrects Self	Tries Again S/N	Completes/No S/N	Converse	Soc.Control V/P/D S/N	Competes S/N	Follows V/P	Controlled V/P/D	Accept Rules/No	Res./Ign.Control S/N	Asserts Rights S/N	Shows Symp./Emp. V/P	Cooperation Strategy H,S,T,TO,TT,CR,JE,PS, AR,RS	Affect Pos./Neg.	Pride	Affection V/P	Hostility V/P

Sketch:

After scanning the puzzle shelf Jimmy selects one puzzle and searches for a table where he can work, He avoids a littered table and selects a clean secluded one. He carefully lays out the puzzle pieces turning them over so the picture shows. He tries a few pieces unsuccessfully then starts on the edge pieces (finding them all first), This strategy brings more success. He works with concentration, just looking up briefly when a child drops a tray nearby, He is distracted briefly by the teacher showing a PF3 how to match some cards but he returns to finish the puzzle and puts it away, He wanders for a bit seeming to be trying to find something to do. He watches a PM4 experiment with magnets until the boy stops. Then Eric (PM5) invites him to play with the blocks and he does. He suggests that they build a house and seems to hold his own with this older boy in a cooperative game. He builds with skill. He refuses to allow Tom (PM4) to join their game then relents and incorporates him when Tom cries, the cooperative interaction breaks down at this point and all 3 boys become involved in their own projects, Then the other 2 boys go off to have juice and Jimmy climbs up and down his "stair" repeatedly. The teacher interrupts saying that it is time to clean up, Jimmy obeys angrily, demanding that Eric should help him, His anger is short lived and he greets Eric with an affectionate hug on his return, After cleaning up they both go to the "circle" to hear the story the teacher will read and have a pleasant conversation about it before she begins,

APPENDIX II

SCORING MANUAL FOR
THE SOCIAL AND NONSOCIAL EXECUTIVE SKILL PROFILE
FOR PRESCHOOL CHILDREN

SCORING MANUAL FOR

THE

SOCIAL AND NONSOCIAL EXECUTIVE SKILL PROFILE

FOR

PRESCHOOL CHILDREN

Martha B. Bronson
Harvard University
December, 1974

THE SOCIAL AND NONSOCIAL EXECUTIVE SKILL PROFILE

SCORING MANUAL

The **Social and Nonsocial** Skill Profile provides three levels of assessment of a child's executive and social behavior. At the most general level, it yields a numerical **Nonsocial** Skill Score and a numerical Social Skill Score, which are composits of several sub-scores. At a second more specific level it provides nine numerical sub-scores which give additional and more detailed information about the child's behavior. These are:

1 - Social Success Score: This score indicates the child's degree of success in his attempts to control others, to resist being controlled, and to compete.

2 - Social Dominance Score: This score provides an assessment of the child's efforts and ability to dominate peers in social interactions.

3 - Social Cooperation Score: This score provides an assessment of the relative amounts of time the child spends in cooperative (vs. associative or parallel) play and his use of cooperative strategies in social interaction.

4 - Negative Social Behavior Score: This score indicates the amount of the child's hostile aggressive behavior and his refusal to accept classroom rules or limits.

5 - Task Attack Skill Score: This score provides an assessment of the child's skill (strategies used) and success in coping with mastery tasks.

6 - Mastery Motivation Score: This score indicates the child's persistence, resistance to distraction and independence in pursuing mastery tasks.

7 - Social Involvement Score: This score indicates the relative amount of time the child spends in social interaction and the degree of his participation (rate of social acts) in social activities.

8 - Non-social Involvement Score: This score indicates the relative amount of time the child spends in non-social activities such as mastery tasks and solitary fantasy or gross motor activities.

9 - Non-involvement Score: This score indicates the relative amount of time the child spends not clearly involved in any focused social or non-social activity.

At the most detailed level the instrument provides specific numerical records of the child's observed behaviors which may be compared with the average scores of a reference group such as the child's class or a larger sample of children his age. These behavior records are grouped in seven Profiles according to subject areas (see the lists below), and are particularly helpful to teachers who can get a clear picture of the child's behavior characteristics in relation to those of his peers and see specific areas of strength or weakness. Since the two general scores and the nine summary sub-scores are derived from the behavioral records in the Profiles, these Profiles also clarify the reasons for high or low scores. The seven Profiles with their constituent behavior characteristics are:

I - Social Control and Dominance Profile

Behavior characteristics included are:

a - Rate successful social control of peers
b - Percent successful social control of peers
c - Rate successful resist control by peers
d - Percent successful resist control by peers
e - Rate successful competes with peers
f - Percent successful competes with peers
g - Rate controlled by peers
h - Rate follows or imitates peers
i - Rate ask social help (vs. instrumental help in mastery task)
j - Dominance ratio (components described on page 10)

NOTE: Sub-score 1 - Social Success Score, and sub-score 2 - Social Dominance Score are derived from the behavior characteristics in Profile I.

II - Social Cooperation Profile

Behavior characteristics included are:

a - Rate of use of cooperation strategies
b - Percent time engaged in cooperative play
c - Percent of social control (of peers) attempts which are verbal
d - Percent time engaged in conversation
e - Rate asserts rights
f - Rate shows sympathy or empathy
g - Rate shows hostility
h - Rate refuses to accept rules

NOTE: Sub-score 3 - Social Cooperation Score, and sub-score 4 - Negative Social Behavior Score are derived from the behavior characteristics in Profile II. The general Social Skill Score is derived from the behavior characteristics in the first two Profiles.

III - Task Attack Skill Profile

Behavior characteristics included are:

a - Rate of use of coping strategies
b - Percent tasks completed successfully
c - Percent trials completed successfully
d - Percent corrects errors
e - Rate notices novelty or discrepancy
f - Rate dual focus

NOTE: Sub-score 5 - Task Attack Skill Score is derived from the behavior characteristics in Profile III.

IV - Mastery Motivation Profile

Behavior characteristics included are:

a - Percent time in mastery activities
b - Rate shows pride in mastery activities
c - Percent asks help with mastery task
d - Percent time distracted during mastery task
e - Average time per mastery task

NOTE: Sub-score 6 - Mastery Motivation Score is derived from the behavior characteristics in Profile IV. The general Nonsocial Skill Score is derived from the behavior characteristics in the third and fourth Profiles.

V - General Involvement Profile

Behavior characteristics included are:

a - Percent time spent in social activities
b - Rate of social acts during time spent in social activities
c - Percent time engaged in cooperative play (repeated from Profile II)
d - Percent time engaged in associative play
e - Percent time engaged in parallel play
f - Percent time in mastery activities (repeated from Profile IV)
g - Percent time in solitary fantasy play
h - Percent time in gross motor activities
i - Percent time not involved in any activities

NOTE: Sub-score 7 - Social Involvement Score, sub-score 8 - Non-social Involvement Score, and sub-score 9 - Non-involvement Score are derived from the behavior characteristics in Profile V. Behavior records from the Involvement Profile show how the child spontaneously allots his time, his modal level of functioning in social interaction(cooperative, associative or parallel), and his level of participation in classroom activities.

VI - Adult Interaction Profile

Behavior characteristics included are:

- a - Rate attempted social control of adults
- b - Percent successful social control of adults
- c - Rate resists the control of adults
- d - Percent successful resist control by adults
- e - Rate controlled by adults
- f - Rate interrupted by adults during mastery tasks

NOTE: No general or summary scores are provided for the behavior records in Profile VI because they do not have an unequivocal observed or theoretical relationship to social or nonsocial skills. They do, however, provide clinical information which may be relevant to social or nonsocial skills in combination with information in other Profiles. Behavior characteristic "a" (rate of attempted social control of adults), for example, indicates the child's adult orientation. High adult orientation may accompany a failure in peer relationships (low social skill and/or dominance scores) in some children, and high dominance or a general high interest in all social others, adults and peers, in others. Behavior characteristic "c" (rate of resisting adult control) may indicate independence in some children and problem behavior in others (if accompanied by high hostility and refusal to obey rule scores,for instance). Behavior characteristics "e" and "f" give an indication of the intrusiveness of the adults in the child's environment. High intrusiveness may occur because the child is perceived to be a "problem" in the classroom or because he is perceived as "dependent" of in need of direction. Low intrusiveness may occur because the child is independent and successful on his own or because the child is being overlooked or ignored. Information from other Profiles could clarify the relationship.

VII - Affect Profile

Behavior characteristics included are:

- a - Rate shows affection
- b - Rate shows hostility (repeated from Profile II)
- c - Rate positive affect during social time
- d - Rate negative affect during social time
- e - Rate positive affect during mastery time
- f - Rate negative affect during mastery time
- g - Rate shows pride in mastery activities (repeated from Profile IV)

NOTE: No general or summary scores are provided for the behavior records in Profile VII because they do not have an unequivocal observed or theoretical relationship to social or nonsocial skills. Exceptions are behavior characteristic "b" (which has clear negative social implications) and behavior characteristic "g" (which is related to mastery motivation), but these items are included in other Profiles and are repeated here only for ease of reference. Some children appear to be more labile and show more affect, both positive and negative, than others. Affect behavior records are included in the observation instrument for clinical use in combination with information in other Profiles. High rates of negative affect in social or mastery tasks, for instance, may indicate problems, but they may also indicate freedom to express emotions (especially if the child has high positive affect rates as well) or high motivation in social or mastery activities. Information from other Profiles could clarify the relationship.

Specific scoring instructions, and a sample Scoring Booklet are provided on the following pages.

SCORING INSTRUCTIONS

I - Requisite Data for Scoring:

Each child should be observed for at least one hour in six ten minute observation periods to obtain sufficient data for scoring. Three (or half) of the observations should be begun when the child is beginning a social interaction, and three (or half) of the observations should be begun when the child is beginning a mastery task. Fifteen minute observations are preferable for older children (over five years of age) because their social interactions and mastery tasks tend to continue for longer periods and the instrument should record this. If fifteen minute observations are used, there should still be six separate observation periods, three beginning when the child is beginning a social interaction and three beginning when the child is beginning a mastery task. All six observations should be of the same length - all ten minute periods or all fifteen minute periods. Each of the six observations should be done on a different day but all six should be completed within one month. If more than six observations are desired (for extra high reliability if grave problems are suspected, for instance) there should always be equal numbers of observations beginning in social interaction and observations beginning in mastery tasks.

II - General Scoring Instructions:

1 - All data from the six separate (or all) observations should be pooled (i.e. added together) within each of the categories for scoring.

example: The total frequency of "competes" for scoring purposes would be the number of "competes" in observation 1 + the number of "competes" in observation 2 + the number of "competes" in observation 3 + the number of "competes" in observation 4 + the number of "competes" in observation 5 + the number of "competes" in observation 6.

2 - Time data (numbers of minutes engaged in certain activities) should also be pooled over the six observations, and should be listed in minutes and quarter minutes as shown on the observation protocols.

example: Ten minutes = 10.00. Nine and a half minutes = 9.50. Twelve and a quarter minutes = 12.25. Five and three quarters minutes = 5.75.

3 - Data will not be listed as raw time or frequency scores, but will be listed as "rate" scores (frequencies divided by time engaged in certain activities) percents of time (spent in certain activities) or success (percent successful resist peer control,for instance) and ratios (number of all controlling activities divided by all being controlled activities,for instance). Divisions to get rate, percent and ratio scores should be carried out to three decimal places and rounded off to two,5 or over in the third decimal place adding an extra 1 to the second decimal place. Percent scores should be left as decimals (i.e. 75% should be left as .75 in the scoring).

4 - In most cases, behavior addressed to or responses to adults and behavior addressed to or responses to peers are scored separately. In order to avoid confusion when totalling scores, all behaviors addressed to or responses to adults should be marked in yellow magic marker on the observation protocols before scoring.

5 - In the case of inadequately marked raw data in the observation protocols, the following rules of thumb are to be observed.

a) If a behavior is not clearly marked as directed to or in response to a peer or an adult, assume the object is a peer.

b) If behaviors which require a success ("S") or no success ("N") qualification are not clearly marked as such, assume a success or "S" mark.

c) All social control scores with a"V"mark are scored as "verbal" even if there is also a D (for demonstration) and/or a P (for physical) in the notation. Only "P" by itself, "D" by itself, or "PD" are considered non-verbal social control scores.

d) If affect scores are not marked "P" for positive or "N" for negative, do not count them in the pooled scores.

e) If a time line does not clearly end at a minute or quarter minute line, assume it stops at the nearest line.

f) If a protocol ends before the completion of a mastery task, assume the task is completed successfully unless otherwise marked. If mastery tasks completed during the observation time are not marked "N" for not completed successfully, assume that they are completed successfully.

6 - Sometimes the numerator or the denominator of a score will be zero since certain behaviors may not occur during any of the observations. The resulting rate, percent, or ratio score will be zero.

III - Specific Scoring Instructions:

All data is listed in order by Profile. The nine sub-scores are listed in order under the appropriate Profiles. The general Social Skill Score is listed after Profiles I and II -- the social skill profiles. The general Nonsocial Skill Score is listed after Profiles III and IV - the mastery profiles. A summary sheet, listing the two general scores and the nine sub-scores appears on the cover of the Scoring Booklet (see the sample following this section). The specific scoring instructions in this section follow the format of the Scoring Booklet.

Profile I - Social Control and Dominance Profile

The Social Control and Dominance Profile lists those behavior characteristics, obtained with the observation categories, that are relevant to the child's social control skills and his general dominance. They are:

a - Rate successful social control of peers - obtained by summing the number of successful social control of peers attempts over all observations, and dividing this by the total amount of time spent in social activities in all observations. It is listed in the Scoring Booklet in the following way so that scoring may be done on the page:

$$\frac{\text{Sum of Peer Social Control Success}}{\text{Sum of all Time Social}} = \underline{\hspace{4cm}} =$$

b - Percent successful social control of peers - obtained by summing the number of successful social control of peers over all observations, and dividing this by the total number of social control of peers attempts in all observations. It is listed in the Scoring Booklet in the following way so that scoring may be done on the page:

$$\frac{\text{Sum Peer Social Control Success}}{\text{Sum Peer Social Control Attempts}} = \underline{\hspace{4cm}} =$$

c - Rate successful resist control by peers - obtained by summing the number of successful attempts to resist the control of peers over all observations, and dividing this by the total amount of time spent in social activities in all observations. It is listed in the Scoring Booklet in the following way so that scoring may be done on the page:

$$\frac{\text{Sum Successful Resist Peer Control}}{\text{Sum of all Time Social}} = \underline{\hspace{4cm}} =$$

d - Percent successful resist control by peers - obtained by summing the number of successful resist control by peers over all observations, and dividing this by the total number of resist control by peers attempts over all observations. It is listed in the Scoring Booklet in the following way so that scoring may be done on the page:

$$\frac{\text{Sum Successful Resist Peer Control}}{\text{Sum Resist Peer Control Attempts}} = \underline{\hspace{4cm}} =$$

e - Rate successful competes with peers - obtained by summing the number of successful competitions with peers over all observations, and dividing this by the total time the child was observed (over all observations). It is listed in the Scoring Booklet in the following way so that scoring may be done on the page:

$$\frac{\text{Sum Successful Competes with Peers}}{\text{Sum of all Time Observed}} = \underline{\hspace{4cm}} =$$

f - Percent successful competes with peers - obtained by summing the number of successful competitions with peers over all observations, and dividing this by the total number of competition attempts over all observations. It is listed in the Scoring Booklet in the following way so that scoring may be done on the page:

$$\frac{\text{Sum Successful Competes with Peers}}{\text{Sum Competes with Peers Attempts}} = \underline{\hspace{4cm}} =$$

g - Rate controlled by peers - obtained by summing the number of times the child is controlled by peers over all observations, and dividing this by the total amount of time spent in social activities in all observations. It is listed in the Scoring Booklet in the following way so that scoring may be done on the page:

$$\frac{\text{Sum all Times Controlled by Peers}}{\text{Sum of all Time Social}} = \underline{\hspace{4cm}} =$$

h - Rate follows or imitates peers - obtained by summing the number of times the child follows or imitates peers over all observations, and dividing this by the total amount of time spent in social activities in all observations. It is listed in the Scoring Booklet in the following way so that scoring may by done on the page:

$$\frac{\text{Sum of Follows or Imitates Peers}}{\text{Sum of all Time Social}} = \underline{\hspace{4cm}} =$$

i - *Rate ask social help* (vs.instrumental help in mastery task) - obtained by summing instances of asking help with social interaction (and excluding asking help with mastery tasks) over all observations, and dividing this sum by the total amount of time spent in social activities in all observations. It is listed in the Scoring Booklet in the following way so that scoring may be done on the page:

$$\frac{\text{Sum of Times ask Social Help}}{\text{Sum of all Time Social}} = \underline{\hspace{4cm}} =$$

j - *Dominance ratio* - obtained by summing all successful social control of peers over all observations with all successful resist the social control of peers over all observations with all successful competes with peers over all observations, and dividing the sum of these three behaviors by the sum of all times controlled by peers over all observations plus the sum of all unsuccessfully resists the control of peers over all observations plus the sum of all follows or imitates peers over all observations. It is listed in the Scoring Booklet in the following way so that scoring may be done on the page:

$$\frac{\text{Sum Social Control S + Sum Resist Control S + Sum Competes S}}{\text{Sum Controlled + Sum Resist Control N + Sum Follows/Imitates}}$$

$$= \underline{\hspace{4cm}} =$$

The first two sub-scores - the *Social Success Score* and the *Social Dominance Score* - are derived from the behavior characteristics in *Profile I*. Scoring instructions for these two sub-scores are therefore listed under *Profile I* scores both here and in the Scoring Booklet.

SUBSCORE 1 - Social Success Score

The Social Success Score is a weighted sum of the success percentages listed in *Profile 1*. Greatest weight is given to success in social control attempts ("b" in the Profile) both because it occurs most frequently in observations and therefore gives the most reliable estimate of success in social interaction, and because it is an active behavior (rather than a reactive behavior as is resisting control) initiated by the child. Greater weight is given to success in resisting the control of peers ("d" in the Profile) than to successful competition with peers ("f" in the Profile) because attempts to compete with peers occur so rarely in observation (often not at all) that success percentages are least reliable of the three behavior characteristics. The Social Success Score is obtained by multiplying the Percent successful social control of peers score ("b" in the Profile by three (3.0), multiplying the Percent successful resist control by peers ("d" in the Profile) by one and one half (1.5), multiplying the Percent successful competes with peers score ("f" in the Profile) by one half (0.5), and adding all three weighted scores together. It is listed in the Scoring Booklet in the following way so that scoring may be done on the page:

(b x 3.0) + (d x 1.5) + (f x 0.5) = =

---------- SUBSCORE 2 - Social Dominance Score

The Social Dominance Score is the sum of the child's relative dominance ratio ("j" in the Profile) plus the three donimance related rate scores - the Rate successful social control of peers score ("a" in the Profile), the Rate successful resist control by peers score ("c" in the Profile) and the Rate successful competes with peers score ("e" in the Profile) - plus sub-score 1, the Social Success Score, minus the child's observed "dependence" as measured by his Rate of asking social help score ("i" in the Profile). It is listed in the Scoring Booklet in the following way so that scoring may be done on the page:

(j + a + c + e + subscore 1) - i = =

----------Profile II - Social Cooperation Profile --

The Social Cooperation Profile lists those behavior characteristics measured by the observation instrument that are relevant to the amount and quality of the child's cooperative and non-cooperative interaction with peers. They are:

a - Rate of use of cooperation strategies - obtained by summing the number of cooperation strategies (including all 10 types of cooperation strategy) used by the child in all the observations, and dividing this sum by the total amount of time spent in social activities in all observations. It is listed in the Scoring Booklet in the following way so that scoring may be done on the page:

$$\frac{\text{Sum of all Cooperation Strategies}}{\text{Sum of all Time Social}} = \underline{\hspace{4cm}} =$$

b - Percent time engaged in cooperative play - obtained by summing the amount of time spent in cooperative (vs. associative or parallel) play over all observations, and dividing this sum by the total amount of time spent in social activities in all observations. It is listed in the Scoring

Booklet in the following way so that scoring may be done on the page:

$$\frac{\text{Sum of all Time in Cooperative Play}}{\text{Sum of Time Social}} = \underline{\hspace{4cm}} =$$

c - Percent of social control (of peers) attempts which are verbal - obtained by summing the number of verbal social control (of peers) attempts over all observations, and dividing this by the total number of social control (of peers) attempts, verbal and non-verbal, over all observations. It is listed in the Scoring Booklet in the following way so that scoring may be done on the page:

$$\frac{\text{Sum Peer Verbal Social Control Attempts}}{\text{Sum Peer Social Control Attempts}} = \underline{\hspace{4cm}} =$$

d - Percent time engaged in conversation - obtained by summing the amount of time spent in conversation (with peers or adults if conversation with adult initiated and maintained by the child) over all observations, and dividing this by the total amount of time spent in social activities in all observations. It is listed in the Scoring Booklet in the following way so that scoring may be done on the page:

$$\frac{\text{Sum of all Conversation Time}}{\text{Sum of all Time Social}} = \underline{\hspace{4cm}} =$$

e - Rate asserts rights - obtained by summing the number of asserts rights over all observations, and dividing this by the total amount of time the child was observed (over all observations). It is listed in the Scoring Booklet in the following way so that scoring may be done on the page:

$$\frac{\text{Sum of all Asserts Rights}}{\text{Sum of all Time Observed}} = \underline{\hspace{4cm}} =$$

f - Rate shows sympathy or empathy - obtained by summing the number of instances of sympathy or empathy shown by the child over all observations, and dividing this by the total amount of time the child was observed (over all observations). It is listed in the Scoring Booklet in the following way so that scoring may be done on the page:

$$\frac{\text{Sum Shows Sympathy or Empathy}}{\text{Sum of all Time Observed}} = \underline{\hspace{4cm}} =$$

g - Rate shows hostility - obtained by summing the number of instances of hostility over all observations, and dividing this by the total amount of time the child was observed (over all observations). It is listed in the Scoring Booklet in the following way so that scoring may be done on the page:

$\frac{\text{Sum all Instances Hostility}}{\text{Sum of all Time Observed}}$ = _______________ =

h - *Rate refuses to accept rules* - obtained by summing the number of all refusals to accept rules over all observations, and divided this by the total amount of time the child was observed (over all observations). It is listed in the Scoring Booklet in the following way so that scoring may be done on the page:

$\frac{\text{Sum of Refusals to Accept Rules}}{\text{Sum of all Time Observed}}$ = _______________ =

The second two sub-scores - the *Social Cooperation Score*, and the non-cooperation or *Negative Social Behavior Score* - are derived from the behavior characteristics in *Profile II*. The general *Social Skill Score* is derived from the behavior characteristics in the first two *Profiles*. Scoring instructions for sub-scores 3 and 4 and for the general *Social Skill Score* are therefore listed under *Profile II* both here and in the Scoring Booklet.

SUBSCORE 3 - Social Cooperation Score

The Social Cooperation Score is the sum of all behavior characteristics which indicate cooperative interaction in *Profile II*. It is obtained by adding the *Rate of use of cooperative strategies* ("a" in the Profile) to the *Percent time engaged in cooperative play* ("b" in the Profile) to the *Percent of social control* (of peers) *attempts which are verbal* ("c" in the Profile) to the *Percent time engaged in conversation* ("d" in the Profile) to the *Rate asserts rights* ("e" in the Profile) to the *Rate shows sympathy or empathy* ("f" in the Profile). It is listed in the Scoring Booklet in the following way so that scoring may be done on the page:

$a + b + c + d + e + f$ = =

SUBSCORE 4 - Negative Social Behavior Score

The non-cooperation or Negative Behavior Score is the sum of the two behavior characteristics which indicate a lack of cooperative interaction in *Profile II*. It is obtained by adding the *Rate shows hostility* ("g" in the Profile) to the *Rate refuses to accept rules* ("h" in the Profile). It is listed in the Scoring Booklet in the following way so that scoring may be done on the page:

g + h = =

------------GENERAL SCORE I - SOCIAL SKILL SCORE

The general Social Skill Score combines the Social Success Score with the Social Cooperation Score, and subtracts the Negative Social Behavior Score and the Rate of asking social help ("i" in Profile I). The Social Success and Cooperation scores are included because both success in attaining social goals and a cooperative mode or style of interaction are assumed to be basic to social skill (note the value judgement implied here and discussed on page 1 of the Executive and Social Skill Manual). The Social Dominance sub-score is not included as part of the general Social Skill Score because it is assumed (an assumption that has been confirmed by observations in the field) that dominance or dominanant behavior (many attempts to control others and a general resistance to being controlled by others) does not necessarily imply a high level of social skill. Hostile aggressive behavior, repeated resistance to classroom rules,and social dependency as measured by repeated requests for help in social situations, are considered to be evidence of a lack of social skill. These behaviors, represented in the Negative Social Behavior Score and the Rate of asking social help, are therefore subtracted from the Social Success and Cooperation scores. The general Social Skill Score is listed in the Scoring Booklet in the following way so that scoring may be done on the page:

(Subscore 1 + Subscore 3) - (Subscore 4 + Rate of asking social help)

= =

------------Profile III - Task Attack Skill Profile------------

The Task Attack Skill Profile lists those behavior characteristics measured by the observation instrument that are related to skill and success in coping with mastery tasks. They are:

a - Rate of use of coping strategies - obtained by summing the number of coping strategies (including all 10 types of coping strategies) used by the child in all the observations, and dividing this sum by the total amount of time spent in mastery activities over all observations. It is listed in the Scoring Booklet in the following way so that scoring may be done on the page:

$$\frac{\text{Sum of all Coping Strategies}}{\text{Sum of all Mastery Time}} = \underline{\hspace{4cm}} =$$

b - Percent tasks completed successfully - obtained by summing the number of tasks completed successfully (total tasks, not individual trials listed in "tries again") over all observations, and dividing this by the total number of tasks attempted over all observations. It is listed in the Scoring Booklet in the following way so that scoring may be done on the page:

$$\frac{\text{Sum Completes Task Successfully}}{\text{Sum Tasks Attempted}} = \underline{\hspace{4cm}} =$$

c - Percent trials completed successfully - obtained by summing the number of trials ("tries again") that are successful (marked "S") over all observations, and dividing this sum by the total number of trials ("tries again" both "S" and "N") over all observations. It is listed in the Scoring Booklet in the following way so that scoring may be done on the page:

$$\frac{\text{Sum Tries Again Successful}}{\text{Sum all Tries Again}} = \underline{\hspace{4cm}} =$$

d - Percent corrects errors - obtained by summing the number of instances of corrects errors over all observations, and dividing this by the total number of trials that were not successful ("tries again" marked "N"). It is listed in the Scoring Booklet in the following way so that scoring may be done on the page:

$$\frac{\text{Sum Corrects Errors}}{\text{Sum Tries Again N}} = \underline{\hspace{4cm}} =$$

e - Rate notices novelty or discrepancy - obtained by summing the number of instances of noticing novelty or discrepancy over all observations, and dividing this by the total amount of time the child was observed (over all observations). It is listed in the Scoring Booklet in the following way so that scoring may be done on the page:

$$\frac{\text{Sum Notices Novelty/Discrepancy}}{\text{Sum of all Time Observed}} = \underline{\hspace{4cm}} =$$

f - Rate dual focus - obtained by summing the number of instances of dual focus over all observations, and dividing this by the total amount of time spent in mastery activities over all observations. It is listed in the Scoring Booklet in the following way so that scoring may be done on the page:

$$\frac{\text{Sum all Dual Focus}}{\text{Sum of all Mastery Time}} = \_\_\_\_\_\_\_\_\_\_ =$$

The fifth sub-score - the Task Attack Skill Score - is derived from the behavior characteristics in Profile III. Scoring instructions for sub-score 5 is therefore listed under Profile III both here and in the Scoring Booklet.

SUBSCORE 5 - Task Attack Skill Score

The Task Attack Skill Score is the sum of all behavior characteristics in Profile III, because all are relevant to skill and success in coping with mastery tasks. It is obtained by adding the Rate of use of coping strategies ("a" in the Profile) to the Percent tasks completed successfully ("b" in the Profile) to the Percent trials completed successfully ("c" in the Profile) to the Percent corrects errors ("d" in the Profile) to the Rate notices novelty or discrepancy ("e" in the Profile) to the Rate dual focus ("f" in the Profile). It is listed in the Scoring Booklet in the following way so that scoring may be done on the page:

$$a + b + c + d + e + f \quad = \qquad\qquad =$$

Profile IV - Mastery Motivation Profile

The Mastery Motivation Profile lists those behavior characteristics measured by the observation instrument that are related to general interest in mastery tasks and persistance, independence and resistance to distraction in pursuing them. They are:

a - Percent of time in mastery activities - obtained by summing the amount of time spent in mastery tasks over all observations, and dividing this by the total amount of time the child was observed (over all observations). It is listed in the Scoring Booklet in the following way so that scoring may be done on the page:

$$\frac{\text{Sum of all Time in Mastery Tasks}}{\text{Sum of all Time Observed}} = \_\_\_\_\_\_\_\_\_\_ =$$

b - Rate shows pride in mastery activities - obtained by summing the number of instances of pride, that occur during mastery tasks, over all observations, and dividing this by the total amount of time spent in mastery activities over all observations. It is listed in the Scoring Booklet in the following way so that scoring may be done on the page:

Sum Pride in Mastery Time / Sum of all Mastery Time = ______________ =

c - Percent asks help with mastery task - obtained by summing the number of instances of ask help with mastery tasks over all observations, and dividing this by the total number of tries again ("S" and "N") over all observations. It is listed in the Scoring Booklet in the following way so that scoring may be done on the page:

Sum of Times ask Mastery Help / Sum all Tries Again = ______________ =

d - Percent time distracted during mastery task - obtained by summing the amount of time the child is distracted during mastery tasks over all observations, and dividing this by the total amount of time spent in mastery activities over all observations. It is listed in the Scoring Booklet in the following way so that scoring may be done on the page:

Sum of all Time Distracted / Sum of all Mastery Time = ______________ =

e - Average time per mastery task - obtained by summing the total amount of time spent in mastery activities over all observations, and dividing this by the number of mastery tasks attempted over all observations. It is listed in the Scoring Booklet in the following way so that scoring may be done on the page:

Sum of all Mastery Time / Sum Tasks Attempted = ______________ =

The sixth sub-score - the Mastery Motivation Score - is derived from the behavior characteristics in Profile IV. The general Nonsocial Skill Score is derived from the behavior characteristics in the third and fourth Profiles. Scoring instructions for sub-score 6 and for the general Nonsocial Skill Score are therefore listed under Profile IV both here and in the Scoring Booklet.

SUBSCORE 6 - Mastery Motivation Score

The Mastery Motivation Score is the sum of those behavior characteristics in Profile IV that are related to interest in mastery tasks, and persistence and pride in pursuing them. A large number of instances of asking help during mastery tasks, relative to the number of independent efforts (tries again), is considered to indicate a lack of mastery or "achievement" motivation because independent effort and a desire to do tasks by oneself are basic to this kind of motivation[1]. The percentage of asks help during mastery tasks is therefore considered negative and is subtracted from the sum of the positive factors in the general score. Small amounts of asking help would not necessarily indicate low achievement motivation but very little would be subtracted in this case, so all ask help instances are counted as negatives. The amount of time the child is distracted while engaged in mastery tasks is also considered to be negatively related to mastery motivation and is subtracted from the sum of the positive factors. The *Mastery Motivation Score* is obtained by adding the *Percent of time in mastery activities* ("a" in the Profile) to the *Rate shows pride in mastery activities* ("b" in the Profile) to the *Average time per mastery task* ("e" in the Profile- divided by ten so that this behavior characteristic does not overwhelm the others),minus the *Percent asks help with mastery tasks* ("c" in the Profile) and minus the *Percent time distracted during mastery tasks* ("d" in the Profile). It is listed in the Scoring Booklet in the following way so that scoring may be done on the page:

$(a + b + \frac{e}{10}) - (c + d) = \qquad\qquad\qquad =$

GENERAL SCORE II - NONSOCIAL SKILL SCORE

The general ***Nonsocial*** *Skill Score* combines the *Task Attack Skill Score* with the *Mastery Motivation Score* because both skill and motivation are considered important to executive mastery skills. Sub-score 5 and sub-score 6 are summed to create the general score. The general ***Nonsocial*** *Skill Score* is listed in the Scoring Booklet in the following way so that scoring may be done on the page:

Subscore 5 + Subscore 6 = =

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[1] McClelland, D. C. *The Achieving Society*. Princeton: Van Nostrand, 1961.

Profile V - General Involvement Profile

The General Involvement Profile lists the relative amounts of time the child spends in the types of social and non-social activities measured by the observation instrument. There is also a score ("b" in the Profile) that assesses the degree of involvement or participation of the child in social activities. Since a child can be engaged in both social and non-social activities at the same time, "involvement" time scores will not necessarily add up to 100 percent of the time observed. Two behavior characteristics listed in this Profile are repeated from their listings in other Profiles ("c" repeated from Profile II and "f" repeated from Profile IV). This is done for convenience of reference in checking the way the child allots his time. Behavior characteristics listed are:

a - Percent time spent in social activities - obtained by summing the total amount of time spent in social activities (cooperative + associate + parallel) over all observations, and dividing this by the total amount of time the child was observed (over all observations). It is listed in the Scoring Booklet in the following way so that scoring may be done on the page:

$$\frac{\text{Sum of all Time Social}}{\text{Sum of all Time Observed}} = \underline{\qquad\qquad\qquad} =$$

b - Rate of social acts during time spent in social activities - obtained by summing the number of social control (of peers) attempts over all observations, with the number of resists the control of peers over all observations, with the number of times controlled by peers over all observations, and dividing this by the total amount of time spent in social activities in all observations. This is listed in the Scoring Booklet in the following way so that scoring may be done on the page:

$$\frac{\text{Sum Peer Social Control + Sum Resist Peer Control + Sum Controlled by Peers}}{\text{Sum of all Time Social}}$$

$$= \underline{\qquad\qquad\qquad} =$$

c - Percent time engaged in cooperative play (repeated from Profile II) - obtained by summing the amount of time spent in cooperative (vs. associative or parallel) play over all observations, and dividing this sum by the total amount of time spent in social activities in all observations. It is listed in the Scoring Booklet in the following way so that scoring may be done on the page:

$$\frac{\text{Sum of all Time in Cooperative Play}}{\text{Sum of all Time Social}} = \underline{\qquad\qquad\qquad} =$$

d - Percent time engaged in associative play - obtained by summing the amount of time spent in associative (vs. cooperative or parallel) play over all observations, and dividing this sum by the total amount of time spent in social activities in all observations. It is listed in the Scoring Booklet in the following way so that scoring may be done on the page:

$$\frac{\text{Sum of all Time in Associative Play}}{\text{Sum of all Time Social}} = \underline{\qquad\qquad\qquad} =$$

e - Percent time engaged in parallel play - obtained by summing the amount of time spent in parallel (vs. cooperative or associative) play over all observations, and dividing this sum by the total amount of time spent in social activities in all observations. It is listed in the Scoring Booklet in the following way so that scoring may be done on the page:

$$\frac{\text{Sum of all Time in Parallel Play}}{\text{Sum of all Time Social}} = \underline{\qquad\qquad\qquad} =$$

f - Percent time in mastery activities (repeated from Profile IV) - obtained by summing the amount of time spent in mastery tasks over all observations, and dividing this by the total amount of time the child was observed (over all observations). It is listed in the Scoring Booklet in the following way so that scoring may be done on the page:

$$\frac{\text{Sum of all Time in Mastery Tasks}}{\text{Sum of all Time Observed}} = \underline{\qquad\qquad\qquad} =$$

g - Percent time in solitary fantasy play - obtained by summing the amount of time spent in solitary fantasy play (fantasy or role play with others is considered social activity) over all observations, and dividing this by the total amount of time the child was observed (over all observations). It is listed in the Scoring Booklet in the following way so that scoring may be done on the page:

$$\frac{\text{Sum of all Time in Fantasy Play}}{\text{Sum of all Time Observed}} = \underline{\qquad\qquad\qquad} =$$

h - Percent time in gross motor activities - obtained by summing the amount of time spent in gross motor activities over all observations, and dividing this by the total amount of time the child was observed (over all observations). It is listed in the Scoring Booklet in the following way so that scoring may be done on the page:

$$\frac{\text{Sum of all Gross Motor Activities}}{\text{Sum of all Time Observed}} = \underline{\hspace{4cm}} =$$

i - Percent time not involved in any activities - obtained by summing the amount of time not involved in any focused social or non-social activities over all observations, and dividing this by the total amount of time the child was observed (over all observations). It is listed in the Scoring Booklet in the following way so that scoring may be done on the page:

$$\frac{\text{Sum of all Time Not Involved}}{\text{Sum of all Time Observed}} = \underline{\hspace{4cm}} =$$

The seventh, eighth and ninth sub-scores - the Social Involvement Score, the Non-social Involvement Score, and the Non-involvement Score - are derived from the behavior characteristics in Profile V. Scoring instructions for these last three sub-scores are therefore listed under Profile V both here and in the Scoring Booklet.

-----------SUBSCORE 7 - Social Involvement Score

The Social Involvement Score is the sum of the percent of time spent in all social sctivities and the degree of involvement in social activities. It is obtained by adding the Percent of time spent in social activities ("a" in the Profile) to the Rate of social acts during time spent in social activities ("b" in the Profile). The rate of social acts score ("b") is divided by 10 so that social participation is more equally weighted with the percent of time spent in social activities. The score is listed in the Scoring Booklet in the following way so that scoring may be done on the page:

$$a + \frac{b}{10} = \qquad\qquad\qquad =$$

-----------SUBSCORE 8 - Non-social Involvement Score

The Non-social Involvement Score is the sum of the three forms of non-social activities in the observation instrument. It is obtained by adding the Percent time in mastery activities ("f" in the Profile) to the Percent time in solitary fantasy play ("g" in the Profile) and the Percent time in gross motor activities ("h" in the Profile). It is listed in the Scoring

Booklet in the following way so that scoring may be done on the page:

f + g + h = =

-----------SUBSCORE 9 - Non-involvement Score

The Non-involvement Score is simply the Percent of time not involved in any activities ("i" in the Profile). It is listed separately as a sub-score because of its complementary relationship to the Social and Non-social involvement scores. It is listed in the Scoring Booklet in the following way so that scoring may be done on the page:

i =

-----------Profile VI - Adult Interaction Profile---

The Adult Interaction Profile lists the adult-child interactions recorded by the observation instrument. They are:

a - Rate attempted social control of adults - obtained by summing the number of social control (of adults) attempts over all observations, and dividing this by the total time the child was observed (over all observations). It is listed in the Scoring Booklet in the following way so that scoring may be done on the page:

$$\frac{\text{Sum Adult Social Control Attempts}}{\text{Sum of all Time Observed}} = \underline{\hspace{4cm}} =$$

b - Percent successful social control of adults - obtained by summing the number of successful social control of adults over all observations, and dividing this by the total number of social control of adults attempts in all observations. It is listed in the Scoring Booklet in the following way so that scoring may be done on the page:

$$\frac{\text{Sum Adult Social Control Success}}{\text{Sum Adult Social Control Attempts}} = \underline{\hspace{4cm}} =$$

c - Rate resists the control of adults - obtained by summing the number of attempts to resist the control of adults over all observations, and dividing this by the total time the child was observed (over all observations). It is listed in the Scoring Booklet in the following way so that scoring may be done on the page:

$$\frac{\text{Sum Resist Adult Control Attempts}}{\text{Sum of all Time Observed}} = \underline{\hspace{4cm}} =$$

d - Percent successful resist control by adults - obtained by summing the number of successful resist control by adults over all observations, and dividing this by the total number of resist control by adults attempts over all observations. It is listed in the Scoring Booklet in the following way so that scoring may be done on the page:

$\frac{\text{Sum Successful Resist Adult Control}}{\text{Sum Resist Adult Control Attempts}}$ = _______________ =

e - Rate controlled by adults - obtained by summing the number of times the child is controlled by adults over all observations, and dividing this by the total time the child was observed (over all observations). It is listed in the Scoring Booklet in the following way so that scoring may be done on the page:

$\frac{\text{Sum all Times Controlled by Adults}}{\text{Sum of all Time Observed}}$ = _______________ =

f - Rate interrupted by adults during mastery tasks - obtained by summing the number of times the child is interrupted by an adult during a mastery task, and dividing this by the total time spent in mastery activities over all observations. It is listed in the Scoring Booklet in the following way so that scoring may be done on the page:

$\frac{\text{Sum Interrupted by Adults}}{\text{Sum of all Mastery Time}}$ = _______________ =

-----------Profile VII - Affect Profile-----------

The Affect Profile lists the social and non-social affect recorded in the observations. Two of the behavior characteristics - Rate shows hostility ("b" in the Profile) and Rate shows pride in mastery activities ("g" in the Profile) - are repeated from other Profiles for ease of reference in determining affect levels for a child. The affect behavior characteristics recorded by the instrument are:

a - Rate shows affection - obtained by summing all instances of showing affection to adults or peers over all observations, and dividing this by the the total time the child was observed (over all observations). It is listed in the Scoring Booklet in the following way so that scoring may be done on the page:

$\frac{\text{Sum all Instances Affection}}{\text{Sum of all Time Observed}}$ = _______________ =

b - Rate shows hostility (repeated from Profile II) - Obtained by summing the number of instances of hostility to adults or peers over all observations, and dividing this by the total amount of time the child was observed (over all observations). It is listed in the Scoring Booklet in the following way so that scoring may be done on the page:

$\frac{\text{Sum all Instances Hostility}}{\text{Sum of all Time Observed}}$ = ________________ =

c - Rate positive affect during social time - obtained by summing the instances of positive affect during social activities over all observations, and dividing this by the total amount of time spent in social activities in all observations. It is listed in the Scoring Booklet in the following way so that scoring may be done on the page:

$\frac{\text{Sum Positive Affect in Social Time}}{\text{Sum of all Time Social}}$ = ________________ =

d - Rate negative affect during social time - obtained by summing the instances of negative affect during social activities over all observations, and dividing this by the total amount of time spent in social activities in all observations. It is listed in the Scoring Booklet in the following way so that scoring may be done on the page:

$\frac{\text{Sum Negative Affect in Social Time}}{\text{Sum of all Time Social}}$ = ________________ =

e - Rate positive affect during mastery time - obtained by summing the instances of positive affect during mastery activities over all observations, and dividing this by the total amount of time spent in mastery activities in all observations. It is listed in the Scoring Booklet in the following way so that scoring may be done on the page:

$\frac{\text{Sum Positive Affect in Mastery Time}}{\text{Sum of all Mastery Time}}$ = ________________ =

f - Rate negative affect during mastery time - obtained by summing the instances of negative affect during mastery activities over all observations, and dividing this by the total amount of time spent in mastery activities in all observations. It is listed in the Scoring Booklet in the following way so that scoring may be done on the page:

$\frac{\text{Sum Negative Affect in Mastery Time}}{\text{Sum of all Mastery Time}}$ = ________________ =

g - Rate shows pride in mastery activities (repeated from Profile IV) - obtained by summing the number of instances of pride, that occur during mastery tasks, over all observations, and dividing this by the total amount of time spent in mastery activities over all observations. It is listed in the Scoring Booklet in the following way so that scoring may be done on the page:

$\frac{\text{Sum Pride in Mastery Time}}{\text{Sum of all Mastery Time}}$ = ______________ =

A sample Scoring Booklet is provided on the following pages.

SCORING BOOKLET

FOR THE

SOCIAL AND NONSOCIAL EXECUTIVE SKILL PROFILE

FOR

PRESCHOOL CHILDREN

Martha B. Bronson
Harvard University
December, 1974

THE SOCIAL AND NONSOCIAL EXECUTIVE SKILL PROFILE SCORING BOOKLET

Child's Name ______________ Age ______________ Sex ______________ Date ______________

School ______________ Class ______________ Scorer ______________

SUMMARY OF SCORES

Name of Score	Child's Score	Class Average	Class High	Class Low	Norm Average	Norm High	Norm Low
Subscores:							
1 - Social Success Score							
2 - Social Dominance Score							
3 - Social Cooperation Score							
4 - Negative Social Behavior Score							
5 - Task Attack Skill Score							
6 - Mastery Motivation Score							
7 - Social Involvement Score							
8 - Non-social Involvement Score							
9 - Non-involvement Score							
General Scores:							
SOCIAL SKILL SCORE							
NONSOCIAL SKILL SCORE							

Profile I - Social Control and Dominance Profile

Behavior characteristics:

a - Rate successful social control of peers -

$$\frac{\text{Sum Peer Social Control Success}}{\text{Sum of all Time Social}} = \underline{\hspace{4cm}} =$$

b - Percent successful social control of peers -

$$\frac{\text{Sum Peer Social Control Success}}{\text{Sum Peer Social Control Attempts}} = \underline{\hspace{4cm}} =$$

c - Rate successful resist control by peers -

$$\frac{\text{Sum Successful Resist Peer Control}}{\text{Sum of all Time Social}} = \underline{\hspace{4cm}} =$$

d - Percent successful resist control by peers-

$$\frac{\text{Sum Successful Resist Peer Control}}{\text{Sum Resist Peer Control Attempts}} = \underline{\hspace{4cm}} =$$

e - Rate successful competes with peers -

$$\frac{\text{Sum Successful Competes with Peers}}{\text{Sum of all Time Observed}} = \underline{\hspace{4cm}} =$$

f - Percent successful competes with peers -

$$\frac{\text{Sum Successful Competes with Peers}}{\text{Sum Competes with Peers Attempts}} = \underline{\hspace{4cm}} =$$

g - Rate controlled by peers -

$$\frac{\text{Sum all Times Controlled by Peers}}{\text{Sum of all Time Social}} = \underline{\hspace{4cm}} =$$

h - Rate follows or imitates peers -

$$\frac{\text{Sum of Follows or Imitates Peers}}{\text{Sum of all Time Social}} = \underline{\hspace{4cm}} =$$

i - Rate ask social help -

$$\frac{\text{Sum of Times ask Social Help}}{\text{Sum of all Time Social}} = \underline{\hspace{4cm}} =$$

j - Dominance ratio -

$$\frac{\text{Sum Social Control S + Sum Resist Control S + Sum Competes S}}{\text{Sum Controlled + Sum Resist Control N + Sum Follows/Imitates}}$$

$$= \underline{\hspace{4cm}} =$$

-----------SUBSCORE 1 - Social Success Score -

$(b \times 3.0) + (d \times 1.5) + (f \times 0.5) =$ $=$

-----------SUBSCORE 2 - Social Dominance Score

$(j + a + c + e + \text{subscore } 1) - i =$ $=$

-----------Profile II - Social Cooperation Profile --

Behavior characteristics:

a - Rate of use of cooperation strategies -

$$\frac{\text{Sum of all Cooperation Strategies}}{\text{Sum of all Time Social}} = \underline{\hspace{4cm}} =$$

b - Percent time engaged in cooperative play -

$$\frac{\text{Sum of all Time in Cooperative Play}}{\text{Sum of all Time Social}} = \underline{\hspace{4cm}} =$$

c - Percent of social control (of peers) attempts which are verbal -

$$\frac{\text{Sum Peer Verbal Social Control Attempts}}{\text{Sum Peer Social Control Attempts}} = \underline{\hspace{4cm}} =$$

d - Percent time engaged in conversation -

$$\frac{\text{Sum of all Conversation Time}}{\text{Sum of all Time Social}} = \underline{\hspace{4cm}} =$$

e - Rate asserts rights -

$$\frac{\text{Sum of all Asserts Rights}}{\text{Sum of all Time Observed}} = \underline{\hspace{4cm}} =$$

f - Rate shows sympathy or empathy -

$$\frac{\text{Sum Shows Sympathy or Empathy}}{\text{Sum of all Time Observed}} = \underline{\hspace{4cm}} =$$

g - Rate shows hostility -

$$\frac{\text{Sum all Instances Hostility}}{\text{Sum of all Time Observed}} = \underline{\hspace{4cm}} =$$

h - Rate refuses to accept rules -

$$\frac{\text{Sum of Refusals to accept Rules}}{\text{Sum of all Time Observed}} = \underline{\hspace{4cm}} =$$

-----------SUBSCORE 3 - Social Cooperation Score

$a + b + c + d + e + f =$ $=$

------------SUBSCORE 4 - Negative Social Behavior Score

g + h = =

------------GENERAL SCORE I - SOCIAL SKILL SCORE

(subscore 1 + subscore 3) - (subscore 4 + Rate of asking social help)

= =

------------Profile III - Task Attack Skill Profile--

Behavior characteristics:

a - Rate of use of coping strategies -

$\frac{\text{Sum of all Coping Strategies}}{\text{Sum of all Mastery Time}}$ = ________________ =

b - Percent tasks completed successfully -

$\frac{\text{Sum Completes Task Successfully}}{\text{Sum Tasks Attempted}}$ = ________________ =

c - Percent trials completed successfully -

$\frac{\text{Sum Tries Again Successful}}{\text{Sum all Tries Again}}$ = ________________ =

d - Percent corrects errors -

$\frac{\text{Sum Corrects Errors}}{\text{Sum Tries Again N}}$ = ________________ =

e - Rate notices novelty or discrepancy -

$\frac{\text{Sum Notices Novelty/Discrepancy}}{\text{Sum of all Time Observed}}$ = ________________ =

f - Rate dual focus -

$\frac{\text{Sum all Dual Focus}}{\text{Sum of all Mastery Time}}$ = ________________ =

------------SUBSCORE 5 - Task Attack Skill Score

a + b + c + d + e + f = =

------------Profile IV - Mastery Motivation Profile--

Behavior characteristics:

a - Percent of time in mastery activities -

$\frac{\text{Sum of all Time in Mastery Tasks}}{\text{Sum of all Time Observed}}$ = ________________ =

b - Rate shows pride in mastery activities -

$$\frac{\text{Sum Pride in Mastery Time}}{\text{Sum of all Mastery Time}} = \underline{\hspace{4cm}} =$$

c - Percent asks help with mastery task -

$$\frac{\text{Sum of Times ask Mastery Help}}{\text{Sum all Tries Again}} = \underline{\hspace{4cm}} =$$

d - Percent time distracted during mastery task -

$$\frac{\text{Sum of all Time Distracted}}{\text{Sum of all Mastery Time}} = \underline{\hspace{4cm}} =$$

e - Average time per mastery task -

$$\frac{\text{Sum of all Mastery Time}}{\text{Sum Tasks Attempted}} = \underline{\hspace{4cm}} =$$

----------SUBSCORE 6 - Mastery Motivation Score

$$\left(a + b + \frac{e}{10}\right) - (c + d) = \underline{\hspace{4cm}} =$$

----------GENERAL SCORE II - NONSOCIAL SKILL SCORE

$$\text{subscore 5} + \text{subscore 6} = \underline{\hspace{4cm}} =$$

----------Profile V - General Involvement Profile--

Behavior characteristics:

a - Percent time spent in social activities -

$$\frac{\text{Sum of all Time Social}}{\text{Sum of all Time Observed}} = \underline{\hspace{4cm}} =$$

b - Rate of social acts during time spent in social activities -

$$\frac{\text{Sum Peer Social Control + Sum Resist Peer Control + Sum Controlled by Peers}}{\text{Sum of all Time Social}}$$

$$= \underline{\hspace{4cm}} =$$

c - Percent time engaged in cooperative play - (repeated from Profile II)

$$\frac{\text{Sum of all Time in Cooperative Play}}{\text{Sum of all Time Social}} = \underline{\hspace{4cm}} =$$

d - Percent time engaged in associative play -

$$\frac{\text{Sum of all Time in Associative Play}}{\text{Sum of all Time Social}} = \underline{\hspace{4cm}} =$$

e - Percent time engaged in parallel play -

$$\frac{\text{Sum of all Time in Parallel Play}}{\text{Sum of all Time Social}} = \underline{\hspace{6em}} =$$

f - Percent time in mastery activities - (repeated from Profile IV)

$$\frac{\text{Sum of all Time in Mastery Tasks}}{\text{Sum of all Time Observed}} = \underline{\hspace{6em}} =$$

g - Percent time in solitary fantasy play -

$$\frac{\text{Sum of all Time in Fantasy Play}}{\text{Sum of all Time Observed}} = \underline{\hspace{6em}} =$$

h - Percent time in gross motor activities -

$$\frac{\text{Sum of all Gross Motor Activities}}{\text{Sum of all Time Observed}} = \underline{\hspace{6em}} =$$

i - Percent time not involved in any activities -

$$\frac{\text{Sum of all Time Not Involved}}{\text{Sum of All Time Observed}} = \underline{\hspace{6em}} =$$

-----------SUBSCORE 7 - Social Involvement Score

$$a + \frac{b}{10} = \qquad =$$

-----------SUBSCORE 8 - Non-social Involvement Score

$$f + g + h = \qquad =$$

-----------SUBSCORE 9 - Non-involvement Score

$$i = \qquad =$$

-----------Profile VI - Adult Interaction Profile--

Behavior characteristics:

a - Rate attempted social control of adults -

$$\frac{\text{Sum Adult Social Control Attempts}}{\text{Sum of all Time Observed}} = \underline{\hspace{6em}} =$$

b - Percent successful social control of adults -

$$\frac{\text{Sum Adult Social Control Success}}{\text{Sum Adult Social Control Attempts}} = \underline{\hspace{6em}} =$$

c - Rate resists the control of adults -

$$\frac{\text{Sum Resist Adult Control Attempts}}{\text{Sum of all Time Observed}} = \underline{\hspace{6em}} =$$

d - Percent successful resist control by adults -

$$\frac{\text{Sum Successful Resist Adult Control}}{\text{Sum Resist Adult Control Attempts}} = \underline{\hspace{4cm}} =$$

e - Rate controlled by adults -

$$\frac{\text{Sum all Times Controlled by Adults}}{\text{Sum of all Time Observed}} = \underline{\hspace{4cm}} =$$

f - Rate interrupted by adults during mastery tasks -

$$\frac{\text{Sum Interrupted by Adults}}{\text{Sum of all Mastery Time}} = \underline{\hspace{4cm}} =$$

Profile VII - Affect Profile

Behavior characteristics:

a - Rate shows affection -

$$\frac{\text{Sum all Instances Affection}}{\text{Sum of all Time Observed}} = \underline{\hspace{4cm}} =$$

b - Rate shows hostility - (repeated from Profile II)

$$\frac{\text{Sum all Instances Hostility}}{\text{Sum of all Time Observed}} = \underline{\hspace{4cm}} =$$

c - Rate positive affect during social time -

$$\frac{\text{Sum Positive Affect in Social Time}}{\text{Sum of all Time Social}} = \underline{\hspace{4cm}} =$$

d - Rate negative affect during social time -

$$\frac{\text{Sum Negative Affect in Social Time}}{\text{Sum of all Time Social}} = \underline{\hspace{4cm}} =$$

e - Rate positive affect during mastery time -

$$\frac{\text{Sum Positive Affect in Mastery Time}}{\text{Sum of all Mastery Time}} = \underline{\hspace{4cm}} =$$

f - Rate negative affect during mastery time -

$$\frac{\text{Sum Negative Affect in Mastery Time}}{\text{Sum of all Mastery Time}} = \underline{\hspace{4cm}} =$$

g - Rate shows pride in mastery activities - (repeated in Profile IV)

$$\frac{\text{Sum Pride in Mastery Time}}{\text{Sum of all Mastery Time}} = \underline{\hspace{4cm}} =$$

SOCIAL CONTROL AND DOMINANCE PROFILE SUMMARY SHEET

PROFILE I

Age: ____________ Sex: ____________

Child's Name: ______________________________

Date: ______________________________

School: ____________ Class: ____________

Behavior Characteristic	child's score	class average	class high	class low	norm average	norm high	norm low
a - Rate successful social control of peers							
b - Percent successful social control of peers							
c - Rate successful resist control by peers							
d - Percent successful resist control by peers							
e - Rate successful competes with peers							
f - Percent successful competes with peers							
g - Rate controlled by peers							
h - Rate follows or imitates peers							
i - Rate ask social help							
j - Dominance ratio							

PROFILE II

SOCIAL COOPERATION PROFILE SUMMARY SHEET

Child's Name: ______________________ Age: ____________ Sex: ____________

School: ______________ Class: ______________ Date: ______________

Behavior Characteristic	child's score	class average	class high	class low	norm average	norm high	norm low
a - Rate of use of cooperation strategies							
b - Percent time engaged in cooperative play							
c - Percent verbal social control attempts (peers)							
d - Percent time engaged in conversation							
e - Rate asserts rights							
f - Rate shows sympathy or empathy							
g - Rate shows hostility							
h - Rate refuses to accept rules							

PROFILE III

TASK ATTACK SKILL PROFILE SUMMARY SHEET

Child's Name: ______________________ Age: __________ Sex: __________

School: ______________ Class: ______________ Date: ______________

Behavior Characteristic	child's score	class average	class high	class low	norm average	norm high	norm low
a - Rate of use of coping strategies							
b - Percent tasks completed successfully							
c - Percent trials completed successfully							
d - Percent corrects errors							
e - Rate notices novelty or discrepancy							
f - Rate dual focus							

PROFILE IV

MASTERY MOTIVATION PROFILE SUMMARY SHEET

Child's Name: ______________________ Age: __________ Sex: __________

School: ______________ Class: ______________ Date: ______________

Behavior Characteristics	child's score	class average	class high	class low	norm average	norm high	norm low
a - Percent time in mastery activities							
b - Rate shows pride in mastery activities							
c - Percent asks help with mastery task							
d - Percent time distracted during mastery task							
e - Average time per mastery task							

PROFILE V

GENERAL INVOLVEMENT PROFILE SUMMARY SHEET

Child's Name: ____________________ Age: __________ Sex: __________

School: ______________ Class: ______________ Date: ______________

Behavior Characteristics	child's score	class average	class high	class low	norm average	norm high	norm low
a - Percent time spent in social activities							
b - Rate of social acts during social time							
c - Percent time engaged in cooperative play							
d - Percent time engaged in associative play							
e - Percent time engaged in parallel play							
f - Percent time in mastery activities							
g - Percent time in solitary fantasy play							
h - Percent time in gross motor activities							
i - Percent time not involved in any activities							

PROFILE VI

ADULT INTERACTION PROFILE SUMMARY SHEET

Child's Name: ______________________ Age: __________ Sex: __________

School: ______________ Class: ______________ Date: ______________

Behavior Characteristics	child's score	class average	class high	class low	norm average	norm high	norm low
a - Rate attempted social control of adults							
b - Percent successful social control of adults							
c - Rate resists the control of adults							
d - Percent successful resists control by adults							
e - Rate controlled by adults							
f - Rate interrupted by adults in mastery tasks							

PROFILE VII

AFFECT PROFILE SUMMARY SHEET

Child's Name: ______________________ Age: __________ Sex: __________

School: ______________ Class: ______________ Date: ______________

Behavior Characteristics	child's score	class average	class high	class low	norm average	norm high	norm low
a - Rate shows affection							
b - Rate shows hostility							
c - Rate positive affect during social time							
d - Rate negative affect during social time							
e - Rate positive affect during mastery time							
f - Rate negative affect during mastery time							
g - Rate shows pride in mastery activities							

APPENDIX III

GENERAL COMPETENCE RATING SCALE

ID#

GENERAL COMPETENCE RATING SCALE

Martha B. Bronson
Harvard University

Child________________________________ Age______________

Rater________________________________ Date______________

How long known child______________________

Where usually see child______________________

Introduction

This rating scale asks about the social and non-social skills of children between the ages of three and six years. The rater may be a teacher, aide or other observer who knows the child well and is familiar with his/her social and non-social behaviors. The setting may be a pre-school, day care center, playground or home.

Scoring

Each category should be rated on a five point scale, with five the highest and one the lowest. A rating of three is average, meaning that the child shows the particular behavior about as often as most other children his age. A child who engages in a particular behavior somewhat more than average would be rated four; somewhat less than average would be rated two. Only one number should be circled for each item. Any behavior which you can't rate should be marked "O". Always compare the child to others of the same age whom you know in the same environment. The standard is the child's behavior in comparison with his peers. Brief explanations or descriptions can be added in the space under the item.

ID#

TASK COMPETENCE

Compared to others in the same age group how often does this child behave in the following ways:

	Frequently	Above Average	Average	Below Average	Rarely	Uncertain
Works or plays well on his/her own	5	4	3	2	1	0
Uses good strategies to solve problems	5	4	3	2	1	0
Isn't distracted when doing a task	5	4	3	2	1	0
Asks for needed help to do a task	5	4	3	2	1	0
Asks for unnecessary help to do a task	5	4	3	2	1	0
Sees his/her errors in a task and corrects them	5	4	3	2	1	0
Gives up on tasks before they're finished	5	4	3	2	1	0
Returns to unfinished tasks even after interruption	5	4	3	2	1	0
Succeeds in tasks he/she tries	5	4	3	2	1	0
Enjoys tasks he/she chooses	5	4	3	2	1	0
Shows pride in what he/she does or makes	5	4	3	2	1	0

ID#

SOCIAL COMPETENCE

Compared to others in the same age group how often does this child behave in the following ways:

	Frequently	Above Average	Average	Below Average	Rarely	Uncertain
Uses words or wits to control others	5	4	3	2	1	0
Uses physical force to control others	5	4	3	2	1	0
Succeeds in controlling or manipulating others	5	4	3	2	1	0
Is controlled or manipulated by others	5	4	3	2	1	0
Imitates others or follows them around	5	4	3	2	1	0
Competes with others for toys, attention, achievement.	5	4	3	2	1	0
Asserts his/her rights to share or fair play	5	4	3	2	1	0
Accepts (or abides by) the rules of the school	5	4	3	2	1	0
Uses strategies like cooperation, sharing, etc.	5	4	3	2	1	0
Shows verbal affection to others	5	4	3	2	1	0
Shows physical affection to others	5	4	3	2	1	0
Shows verbal hostility to others	5	4	3	2	1	0
Shows physical hostility to others	5	4	3	2	1	0
Enjoys social interaction	5	4	3	2	1	0

ID#

GENERAL COMPETENCE RATINGS

	Top 20% of group	Above Average	Average	Below Average	Bottom 20% of group
Compared to others in the same age group, how would you rank this child's general level of task competence...	5	4	3	2	1
Compared to others in the same age group, how would you rank this child's general level of social competence..	5	4	3	2	1

TIME ALLOCATION RATINGS

Compared to the others in the same age group, how much time does this child spontaneously spend in the following activities (score as in general competence ratings on the same one to five scale):

Social activities....................................	5	4	3	2	1
Task oriented or mastery activities..................	5	4	3	2	1
Apparent aimlessness (no discernible direction, goal or focus of activity)................................	5	4	3	2	1